





In a competitive North American electric power industry, Ontario Hydro is well positioned to lead the electrical utility business of the 21st century.





#### Corporate Profile

Ontario Hydro is one of the largest utilities in North America in terms of installed generating capacity. Its customers include 306 municipal electric utilities, which serve more than 2,946,000 customers, and Ontario Hydro's Retail Company, which serves almost one million retail customers, including 103 large direct customers. The Ontario Hydro system includes 69 hydroelectric stations, five nuclear stations and six operating fossil-fueled stations. The demand contribution of these stations in 1996 was 54% nuclear, 13% fossil, 26% hydroelectric and 7% from other sources, such as independent power producers.

Total in-service system capacity is approximately 29,000 megawatts, transmitted across 29,000 kilometres of transmission lines and 109,000 kilometres of distribution lines. The total electrical production in 1996 was approximately 144 terawatt-hours. Ontario Hydro, a self-sustaining corporation without share capital, was created in 1906 by provincial statute and operates today under the Power Corporation Act of Ontario. Bonds and notes are issued by Ontario Hydro and are guaranteed by the Province of Ontario.

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### Letter to the Minister

To the Honourable Norman Sterling, Minister of Environment and Energy:

I am pleased to submit to you Ontario Hydro's report of the financial position of the Corporation, with discussion and analysis of issues and initiatives for 1996 and beyond.

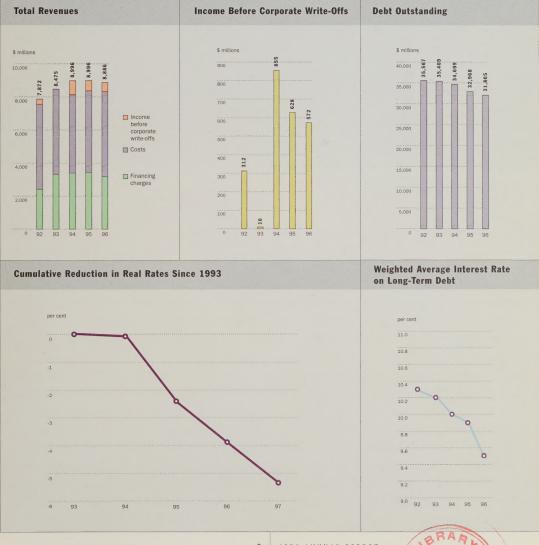
We want to thank your staff at the Ministry of Environment and Energy for their cooperation extended over the year.

M 9 & arligh William A. Farlinger

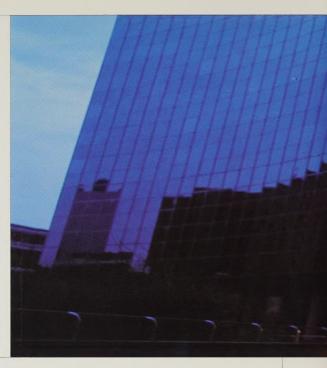
Chairman

# **Financial Summary**

Ontario Hydro's strategic initiatives will enable the Corporation to successfully compete in a more open and competitive marketplace. Through our rate commitment, stable revenues, increased productivity and planned cost reductions, we will continue to significantly reduce our debt to ensure our viability in the electricity industry of the 21st century.



A reorganized Ontario Hydro is poised for a future filled with innovation and growth. We welcome the challenges of competition and the many new opportunities for success that will unfold as markets open up in North America and the rest of the world.



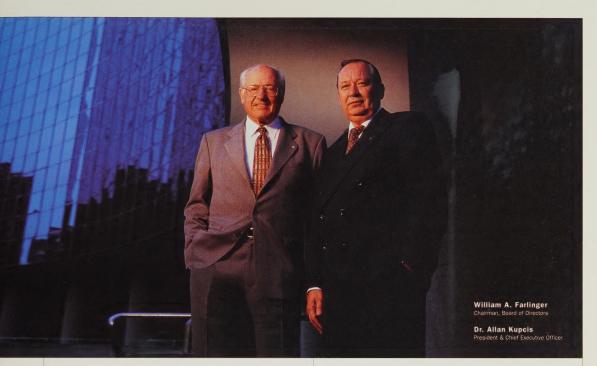
# The Future Is Now and Ontario Hydro Is Ready

For 90 years, Ontario Hydro has served the province by building and maintaining one of the world's largest and most reliable electricity systems. While we are justifiably proud of our many achievements, we now stand on the threshold of a very different era in our industry, one that demands new skills and broader visions. The framework for a competitive North American electricity industry is nearing completion. As one of the leaders of the industry's restructuring movement, Ontario Hydro is ready to face the future that it has been helping to shape.

The province is ready as well. 1996 saw the most thorough and widespread public discussion on the future of Ontario's electricity system since the begin-

ning of this century. There now appears to be overwhelming customer and stakeholder agreement that a competitive electricity system is both inevitable and, provided important public policy issues can be resolved, desirable as well.

Ontario Hydro continues to advocate an unequivocal end to its historic monopoly, and is ready to compete in an open marketplace in which customers have the freedom to choose and all service suppliers are subject to the same rules, equitably applied. We have no doubt that competition will be good for our customers, for Ontario and for Ontario Hydro. Competition stimulates our creativity, disciplines our planning, energizes our work, sharpens our scrutiny



of expenditures, and, above all, compels us to focus on the needs of our customers.

The biggest change Ontario Hydro made last year to prepare for the future was to start the structural unbundling of the Corporation into three signature businesses – generation, transmission and retail – as well as developing the proposal to create a truly independent Central Market Operator (CMO). The CMO should fulfill the functions of the Independent System Operator as it is being developed in some North American jurisdictions and should also design a financial exchange and a spot market. The transmission and retail companies have separated the operation of wires and services in anticipation of the wires networks becoming regulated monopolies, as they are in other parts of the world where competition is more advanced. Equally important is the establishment of the Corporate Business Development Group. This group will play a key role in the future success of Ontario Hydro by identifying, developing and managing new business opportunities that will strengthen and expand our market share for energy products and services. Moreover, in pursuit of this strategy, Ontario Hydro remains firm in its resolve that sustainability must include continued attention to advances in environmental performance.

An analysis of Ontario Hydro's competitive position in all its businesses yields encouraging results. Once unbundled, our traditional strengths lose none of their advantages and will be enhanced through the operational flexibility and service innovation made possible by the new company structure. Each of the new businesses will be accountable for operational and financial performance and will have the mandate, within regulatory and corporate policy frameworks, to pursue its marketplace objectives.

This structure is congruent with our new corporate strategy – a multi-business, convergent strategy that has Ontario Hydro evolving rapidly beyond its fundamental role of energy supply to one of offering a

wide range of energy and related services to a market-place that spans the globe. It is also consistent with power industry restructuring and regulatory reform in the U.S., our largest potential market, where key developments last year took the industry past the point of no return: *The Telecommunications Act*, which erased the regulatory borders that had been separating the telecommunications, cable and electricity industries; the U.S. Federal Energy Regulatory Commission's Open Access Order 888; the introduction of OASIS as a transmission services trading platform; the establishment of an electricity futures market on the New York Mercantile Exchange; and legislation in four states, including California, that may open up wholesale and retail power markets in the near future.

Utility change is under way elsewhere in Canada as well, most notably in Alberta, which became, in early 1996, the first province to permit open access and some degree of wholesale competition, and at Hydro-Québec, which recently announced it wants to open its grid to competition in return for access to U.S. markets. It appears that all of Canada is ready to move beyond the electricity monopolies that are no longer required to reliably serve customers.

In 1996, we took extraordinary measures to return our nuclear facilities to the position that they once enjoyed of being among the top performers on the continent. At mid-year, we launched the Nuclear Excellence initiative, committing the necessary funding and resources to achieve performance at world-class standards. And in January 1997, a team of highly respected nuclear power experts, with proven experience in nuclear recovery programs, were put in charge of Ontario Hydro's nuclear operations. They were given responsibility for leading and managing the recovery of our nuclear program. Our nuclear stations account for more than 60 per cent of Hydro's generating capacity, and their reliable, high-capacity performance will drive much of our future competitive

success in the power supply business.

Another major step we took last year was the Board of Directors' approval of a number of charges and write-offs, which were necessary as a result of operational decisions. These decisions, made in light of changing business circumstances, resulted in almost \$2.6 billion being charged to 1996 income. Decisions like these reflect Hydro's ongoing drive to prepare for an open and competitive marketplace (see "Managing Financial Strength," page 16).

Behind all last year's changes are the people who make them work. Ontario Hydro's staff amplified their efforts, output and commitment in conjunction with management's new focus on business leadership and explicit expectations of performance, productivity and flexibility. A labour agreement with the Power Workers' Union in late 1996 is evidence that this encouraging trend will continue. The new agreement provides stability for the next four years and balances the needs of our employees and our customers, as we prepare for the future. As a result, Ontario Hydro and its employees can prepare themselves for the challenges brought about by the changing electrical utility environment.

May 14, 1996, marked the 90th anniversary of Ontario Hydro's creation by an Act of the Ontario legislature. It is important to note that at the time of its creation, the Hydro-Electric Power Commission was not, in fact, given a monopoly to provide electricity to the province. Indeed, Ontario Hydro operated in parallel to private companies as a transmission company, serving the needs of both the Toronto area and outlying municipalities. Bold dreams, technological innovation, hard work and aggressive marketing were responsible for Hydro's great success in its early days. Today, the freshness of changes we have made over the last four years, in conjunction with Ontario Hydro's traditional strengths and industry leadership, give us the ability to approach a newly competitive marketplace with optimism, enthusiasm and confidence.



Operations Report

# **The Power of Change**

"We are at the threshold not only of a new industry structure but a new era of decision-making by Ontario Hydro's senior officers." - O.A. Kupcis, President & Chief Executive Officer

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# 1

### Restructuring for a Competitive Marketplace

The continuing evolution of Ontario Hydro was dramatically punctuated in October with the adoption of a new structure that reflects both the strengths of the Corporation and the imperatives of the emerging North American energy marketplace. This structure will support the Corporate strategy of maximizing Ontario Hydro's value to its customers and shareholder. The following is an overview of the new structure and its components.

business units are the Corporate Business Development and Corporate Services functions.

### The Generation Company (Genco)

Ontario Hydro enjoys a uniquely complementary mix of generation sources that, taken together, will give the Corporation considerable market advantages in North America. Most of the company's power is nuclear and hydroelectric, resulting in very low fuel and Operations,

### Corporate Centre

The Corporate Centre supports the President and CEO

in managing the overall affairs of Ontario Hydro and is responsible for developing and monitoring strategies, policies and performance targets for the business units, as well as strategies involving communications, finance, treasury, human resources, legal affairs, Aboriginal affairs and the environment on behalf of the President.

### Business Units Ready to Meet the Future

In place of the vertically integrated monopoly that has defined Hydro since its creation in 1906, there are now three separate signature businesses – Generation, Transmission and Retail – each with a commercial and growth-oriented mandate, and a Central Market Operator that will be separated as much as possible from other Ontario Hydro operations. Augmenting the

In place of the vertically integrated monopoly that has defined Ontario Hydro since its creation in 1906, there are now three separate signature businesses – Generation, Transmission and Retail – each with a commercial and growth-oriented mandate.

Maintenance and Administration costs for baseload needs. Ontario Hydro's fossil stations are the smallest part of the mix, but they provide system reliability and flexibility. These units respond quickly to the peaking needs of both domestic and export customers, and provide backup to the baseload capacity, a role they performed well in 1996.

Genco is a single signature business, comprised of five operating lines: Hydroelectric, Fossil and the Bruce, Darlington and Pickering nuclear power stations. Genco's assets are Ontario Hydro's 80 power stations that are, together, substantial and diverse enough to effectively compete with other major generators both inside and outside the province. While the Macdonald Report recommended the fragmentation of this portfolio, Ontario Hydro believes that the pronounced trend

toward consolidation of generating capacity in the U.S., through mergers and acquisitions, sends a clear message that the future marketplace, at least for bulk power sales, will be dominated by large-capacity, price-leading generators.

### Moving Towards Nuclear Excellence

For the duration of the Nuclear Recovery Plan leading to nuclear excellence (see page 6), all aspects of nuclear operations will report directly to the CEO through the Executive Vice-President and Chief Nuclear Officer. The Executive Vice-President and Chief Nuclear Officer is leading a nuclear recovery team in an aggressive plan to achieve performance at world-class standards. Electricity produced from all generators will, however, be treated as a single business product line and coordinated by Genco, which will have sole responsibility for services, investment planning and project functions.

### The Transmission Company (Transco)

Transco is ultimately envisaged as a portfolio of related businesses which may include partnerships with other fixed-link suppliers, such as natural gas pipelines and telecommunications infrastructure suppliers. Currently, Ontario Hydro's 29,000-kilometre high-voltage wires network, known as the GRID, is the established business. It may soon become a regulated common carrier that will form the backbone of the province's competitive electricity system. As such, the operation, maintenance, modifications and new additions to the GRID system will be managed to meet its customers' transmission services requirements as a separate company from other commercial undertakings within Transco.

### The Retail Company (Retailco)

Ontario Hydro's Retail Company currently serves approximately one million customers in the province. As with high-voltage wires, it is anticipated that

distribution networks in Ontario, including Ontario Hydro's, will become tariff-regulated. Accordingly, the Retail Company has been divided into two distinct businesses: Distribution Operations and Customer Solutions. Distribution Operations maintains over 100,000 kilometres of distribution line from its 46 centres across Ontario. It has a mandate to deliver a safe, reliable supply of electricity and related services to end-use customers. In a regulated market-place, Ontario Hydro expects to continue serving, at least initially, all customers in its current service areas, although its customer base could potentially change as the electricity distribution system in Ontario is restructured.

Customer Solutions has the task of developing creative portfolios of energy services and related products and services that will retain and attract customers. For now, its activities will be confined to the current Retailco service area and to joint ventures with other distribution utilities in Ontario. As the market opens up, however, Customer Solutions will be aggressively seeking business opportunities in the broader Ontario and North American markets.

For the present, Retailco will retain responsibility for purchasing and sales on behalf of the Ontario power pool. This function is structuring its market and system operations separately from its merchant functions, reflecting the changing reliability and commercial relationships developing in the competitive North American energy market. These and other functions, such as electrical inspection and regulation, are being established as viable stand-alone businesses or value-added functions for other businesses inside or outside of Ontario Hydro.

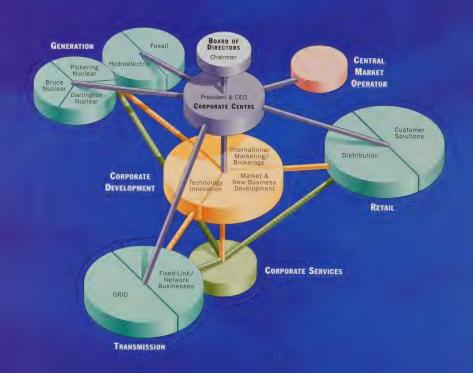
### Central Market Operator

An open, competitive marketplace requires a wholly independent entity to manage the operation of the electricity system and the market through which

## Ready To Compete

### **Ontario Hydro's New Corporate Structure**

As of January 1, 1997, Ontario Hydro moved from a vertically integrated utility to a restructured Corporation with three signature businesses – Transmission, Retail and Generation, as well as a Central Market Operator reporting to the Chief Executive Officer. The **Transmission Company** is planning to manage a variety of network or common carrier businesses of which Ontario Hydro's transmission system (GRID) provides a backbone. The **Retail Company** is moving to develop a predominant role as a marketer of energy and energy services to its customers in the future competitive marketplace and retains Ontario Hydro's retail distribution business. The **Generation Company**, including fossil, hydroelectric and nuclear, will give us the size and flexibility to compete in the North American market. During the duration of the Nuclear Recovery Plan, leading to Nuclear Excellence, all aspects of nuclear operations will report directly to the Chief Executive Officer. A small Corporate Centre (1% of total Ontario Hydro staff) will develop and monitor overall strategies, policies and performance targets on behalf of the President.



electricity is traded. The Central Market Operator (CMO), formerly within the Electricity Exchange, now reports directly to the CEO. Throughout 1997, Ontario Hydro will move to separate from its operations, as completely as possible, those functions that will make up the CMO. The CMO should fulfill all of the standard functions assigned to the Independent System Operator in other North American jurisdictions.

### Corporate Business Development

New to Ontario Hydro, Corporate Business Development's role is to explore growth opportunities and to secure new customers outside of Ontario Hydro's existing lines of business. This function analyzes the Corporation's competitive position; promotes technological innovation; conducts forward market scanning; and assesses strategic partnership, alliance and merger and acquisition opportunities. It also has the mandate to germinate and incubate new businesses which may later be spun off. The combined expertise and experience of Ontario Hydro International Inc. and Ontario Hydro Technologies will contribute to the evolution of Corporate Business Development.

### **Corporate Services**

Corporate Services is responsible for common services that can be most efficiently provided to the business units on a shared basis. With increasing emphasis on efficiency, services such as information technology, real estate, environment, health and safety, investment recovery, waste management and workplace services have been located in Corporate Services to achieve economies of scale and reduce costs.

### Change at Every Level

All of these changes are conceptually within the mainstream of the power industry restructuring now taking place elsewhere in North America and, indeed, throughout the world. They also make sense for Ontario Hydro. The key principle behind these changes is that we will now focus on success in each line of business rather than simply in Ontario Hydro as a whole. The goal is to make the signature business units as stand-alone as possible and to migrate service functions into each unit to the greatest extent practicable. This, we believe, is a formula for flexibility, innovation and multidirectional growth.

Much of the last quarter of 1996 was spent preparing for these fundamental structural changes, which took effect on the first day of 1997. However, throughout the year, in every corner of the Corporation, management and staff studied, planned and implemented many smaller-scale changes designed to prepare Ontario Hydro for a more competitive future.

One broad area of change is the menu of price options now available to our customers. While adhering to our goal of no average rate increase until at least the end of the decade, Ontario Hydro has been able to craft an extensive range of pricing options that gives customers greater choice and more control over their energy costs. One example is the Load Retention and Expansion price option, which replaces a fixed price with a process for negotiating a price when none of Hydro's existing price options meet competitive conditions in the customer's unique circumstances. This process has been used very successfully in retaining significant sales for Ontario Hydro in cases in which customers would have shifted production or relocated plants to another jurisdiction; switched to another energy source; or generated their own electricity. It has also helped economic development in the province by encouraging a number of plant expansions and the siting of new production facilities in Ontario. Price competition will likely dominate the early stages of a competitive marketplace, and Ontario Hydro is rapidly developing the expertise that will be necessary to be both competitive and profitable.



### Technology at Work

### Hydroelectric Power Leads in Efficiency

Nowhere is the long tradition of Ontario Hydro's technological superiority more evident than in its hydroelectric system. With an average age of 60 years, the 69 generating stations and 247 dams maintained by the Corporation continue to harness, efficiently

and responsibly, the power of the province's key renewable resource. The Hydroelectric Business is

our most cost-efficient energy producer, generating more than 25 per cent of Ontario's energy while accounting for only six per cent of Ontario Hydro's total operating costs.

Protecting and enhancing the value of these assets is achieved through technically advanced maintenance programs. Hydroelectric takes a portfolio approach to its assets, carefully evaluating both capital and operating risks and opportunities. Sir Adam Beck 2 Generating Station, Ontario Hydro's flagship plant, is a case in point. In mid-December, the first of 16 generating units to be rehabilitated at this station went back in service. The remaining units at this 42-year-old plant are targeted to be rehabilitated by the end of 2003, producing another 150 megawatts of capacity and more than 300 gigawatt-hours of energy output.

At R.H. Saunders Generating Station on the St. Lawrence River, a multiyear program to rehabilitate the station units using new concrete-cutting technology was completed in 1996. This work and other rehabilitation process improvements saved \$18 million from the original project estimate. An automated monitoring system has been installed to assess the effectiveness of the process, and other utilities have shown interest in this leading edge technology.

The Hydroelectric Business produced near record levels of energy in 1996, while Fossil produced 50 per cent more energy than planned. Both exceeded their revenue contribution targets.

### Nuclear Targets Top-Quartile by 1999

Ontario Hydro's nuclear units have slipped in production in recent years from the world-leading performance levels they enjoyed before the 1990s, but they are now beginning to recover. The start-up problems at the Darlington station have been resolved, and the plant is running well – at around 90 per cent capacity factor. The Nuclear Business has fixed the power pulse concerns that forced the derating of units at the Bruce station, and these have moved to high-power operation. In addition, older boilers have been cleaned, and all appear capable of serving out their expected service lives.

Performance at the Pickering station has been disappointing, but there is justifiable optimism that the Nuclear Recovery Plan and the new Nuclear management team will restore the great value of this station, which celebrated 25 years of service in 1996. Five of the Pickering units are back in service, and in

November the Atomic Energy Control Board relicensed the station for a six-month period, enough time to continue improvements already under way and return Pickering to a condition in which it can be relicensed for the normal two-year period.

In pursuing nuclear excellence, our objective is to raise performance ratings to the top quartile of North American plants by 1999, a goal we believe is very achievable.

### Fossil Energy Production Exceeds Expectations

Fossil proved the value of its critical backup role in 1996 by responding reliably in replacing the loss of approximately 3,000 megawatts of nuclear capacity from the prolonged Pickering shutdown. Fossil energy production for the year was 19.5 terawatt-hours, more than 50 per cent over plan. About 30 per cent of this energy output was exported to neighbouring utilities, primarily in Michigan. In May, the fourth unit at Lambton Generating Station was returned to service, at minimal cost, to help meet peak seasonal demands, earning significant additional revenue.

Despite this unplanned demand on its facilities, Fossil continued to reduce its production unit energy

cost through operating efficiencies, business process improvements, the use of more economical coal

blends and new coal contracts. Fossil's unit energy costs currently rank better than average compared with its competitors in the U.S. northeast, and near the upper quartile for peaking plants in that region.

### Information Technology Advances

Corporate Services is responsible for providing new and upgraded information technologies across the Corporation, and considerable investments were made in this area in 1996, most notably in Retail, Hydroelectric, Fossil and Nuclear. Significant and

measurable improvements in productivity and performance in inter-facility communications and customer service are expected to be achieved very quickly.

The Electricity Exchange's Customer Communications System won praise for providing customers with near real-time access to data on energy consumption and hourly prices of electricity from their desktop computers. This system also improves the timeliness and quality of the load curtailment notification which customers receive from Ontario Hydro's system operators.

### **Customer Communications Centres**

By the end of 1996, Retail Company staff were being trained on new telecommunications technologies being installed in two Customer Communications Centres, scheduled to go on-line early in 1997. These state-of-the-art facilities in Markham and London replace 16 billing centres located across the province. The Markham centre will handle incoming calls from retail customers, while London will handle primarily outgoing calls. The London centre will also be equipped to handle incoming calls in the event of emergencies or technical problems in Markham.

Centralizing telecommunications will ensure a reliable, prompt and professional response to all Retail customer concerns, from emergency service needs to questions about billing.

Centralizing telecommunications will ensure a reliable, prompt and professional response to customer questions and concerns. It will also be a strategic tool for marketing and sales in a competitive electricity system when an advanced on-line Customer Service System is introduced in 1998.

### Communicating on the World Wide Web

Ontario Hydro entered the networked world in 1996 with the launch of its Corporate site on the World Wide Web. The site, developed by Corporate Affairs

in conjunction with Corporate Services and the business units, is located at www.hydro.on.ca.

### Photovoltaic Applications

Renewable energy applications that could lead to costeffective photovoltaic building materials are under way at a number of sites around Toronto. One project this year involved the installation of a solar canopy at the Hugh Macmillan Rehabilitation Centre. The canopy provides protection from rain at the entrance

to the centre. When it isn't raining, the unique inverter system in the canopy takes power from the solar panels and returns it to the GRID.

Another significant initiative in the area of photovoltaics was the acquisition by Ontario Hydro Technologies of a unique technology called Spheral Solar™. An innovative method of producing more robust and flexible solar cells, this technology has the potential to bring down the cost of photovoltaics.

### **Integrated Protection and Control System**

Developed in GRID District Operations, Ontario Hydro's Integrated Protection and Control System (IPACS) is proving to be a useful and popular technology at home and abroad. The system, now employed at several sites in Ontario, lowers operating and maintenance costs. Voltage and current waveforms are captured and processed digitally, helping the utility identify a wide range of problems and address them quickly. The system can also supply information to optimize maintenance programs on power equipment.

Ontario Hydro International Inc. (OHII) has sold four IPACS units to Luz del Sur, the electricity distribution company in Lima, Peru, in which OHII has a minority interest. The units were commissioned in 1996. Northeast Utilities in the U.S. has purchased three units, and a trial installation is under way at

Bonneville Power Administration in Portland, Oregon. Units were tested to international standards at the Comision Federal de Electricidad's LAPEM laboratory in Mexico City.

### Power Quality

Power quality is an increasingly important issue for commercial and industrial customers who can ill afford voltage fluctuations that disrupt the operation of microcircuit-driven equipment. As a result, a Power

Power quality is an increasingly important issue for commercial and industrial customers who can ill afford voltage fluctuations that disrupt the operation of microcircuit-driven equipment.

Quality Response capability was instituted across all districts to resolve customer issues. The program employs specially trained local staff to measure and analyze power quality problems, most of which originate at the customer end and are economically resolvable. All municipal and direct customers were given information outlining power quality problems and the assistance available from Ontario Hydro.

### **Tension Monitoring Equipment**

The hazard of sagging transmission lines was vividly demonstrated in the western U.S. last summer. Two major outages were attributed to flashovers when lines sagged too close to vegetation. A concern for utilities everywhere, the potential for further such incidents could be exacerbated in a competitive electricity system in which large amounts of bulk power are transported across jurisdictions over lines that were originally designed to handle only regional transmission needs. To help avoid this problem in Ontario, GRID is conducting a trial using tension monitoring equipment to evaluate real-time sag in transmission line conductors.

Ontario Hydro's new state-of-the-art Customer Communications Centre in Markham – providing reliable, prompt and professional customer service response.



Reliability, efficiency and responsiveness to customers all underlie the lasting success of Ontario Hydro's energy solutions. Continuous upgrading of operational and maintenance technologies ensures that Hydro's customers will always be at the leading edge of energy services they can count on.

The Power of Change







3

### Managing Financial Strength

The lessons of North American deregulation history, while still being written, are very clear. No business, not even the largest, can long survive the intense competition in a newly deregulated industry if it cannot draw on financial strength, depth and agility. This is especially true in the early years of industry restructuring, when markets become more competitive and crowded. It is true during the shakeout phase of restructuring. It is equally true after the marketplace

stabilizes because the players that remain are efficient and fiercely com-

petitive at every level of their organizations.

· Like every other large utility on the continent,
Ontario Hydro has both financial strengths and weaknesses. Our main concern is, of course, a debt ratio that could negatively affect our ability to compete, depending on the timing and rules of competition.
This is why debt reduction and sound financial management have been central to our financial strategy for the past three years, with rewarding results.
At the same time, we have further mitigated the effect of our debt on short-term competitiveness through an aggressive search for operational efficiencies and sophisticated use of financial instruments and arrangements.

As to inherent strengths, few utilities have more than Ontario Hydro. Combined with visionary and adroit financial management, our facilities and our people can and will be formidable competitors in an open marketplace, when it begins and when it matures. (For more detailed discussion on Ontario Hydro's analysis and outlook on these trends, see "Industry Restructuring," page 39, and "Note 19 – Stranded Debt, Industry Changes and Asset Impairment," page 63).

The following are some financial management highlights from 1996.

No business can long survive the intense competition in a newly deregulated industry without considerable financial strength, depth and agility.

### **Preparing for Competition**

In December, Ontario Hydro's Board of Directors approved a number of charges and write-offs as a result of operational decisions, which resulted in almost \$2.6 billion being charged to 1996 income.

These decisions, made in light of future uncertainties, reflect Ontario Hydro's continuing preparations for the emerging open and competitive marketplace.

The operational decisions were:

• not to retube Bruce Unit 1, for a write-off of \$260 million Ontario Hydro's surplus generating capacity, as well as uncertainties surrounding future demand and market prices for electricity, were the main reasons for not retubing. The unit will be operational until 2000, when it will be taken out of service.

- not to proceed with planned hydroelectric generating capacity expansion of 220 megawatts at three existing Mattagami River stations, for a write-off of \$282 million Since customer demand for electricity is unlikely to grow enough in the short term to justify a previous decision to expand these stations, Ontario Hydro needed to write off the amount that it paid for the associated development rights, which was previously held on the balance sheet as an asset.
- to write off \$1.2 billion in surplus heavy water

  The heavy water that was being held for loss makeup is no longer required because of the shutdown of Bruce Unit 2 in 1995 and the scheduled shutdown of Unit 1 in 2000. Ontario Hydro will retain sufficient heavy water to serve the estimated loss requirements of the remaining 18 nuclear units.

The accounting policy changes include:

• charging all generation-related demand management expenditures to Operations, Maintenance and Administration as they are incurred, with a resulting write-off of \$398 million

Demand management activities encourage customers to conserve electricity, or to use it more efficiently, in

order to minimize more expensive generation or to address transmission limitations. Because it is moving to a more commercial operating environment, Ontario Hydro's generation-related demand management expenditures will be expensed as incurred, effective January 1, 1997. All current unamortized expenditures have been written off to 1996 operations.

• specifying that \$400 million in estimated expenditures for the Nuclear Recovery Plan be charged to 1996 operations Ontario Hydro has embarked on a program, which will continue until 2001, to ensure that adequate Nuclear Recovery Plan expenditures are made in future years to allow for the achievement of its Nuclear Excellence Strategy. The cost of the program has been accrued and charged to operations, as approved by the Board of Directors under its ratesetting authority.

In addition, the Board approved adopting new accounting for post-employment benefits other than those for pensions. In 1997, Ontario Hydro will begin to implement accrual accounting for post-employment benefits in anticipation of new recommendations from the Canadian Institute of Chartered Accountants. Prior to 1997, the costs of providing these benefits were charged to operations as the benefits were paid. The transition obligation of \$763 million arising from this conversion to accrual accounting will be charged to retained earnings on January 1, 1997.

### Managing Corporate Risks

Ontario Hydro's Treasury Division is on the leading edge of innovative financing and financial engineering technology designed to raise capital and manage interest rate, foreign exchange, insurance and corporate

By taking full advantage of market conditions, we successfully launched our first Japanese bond issue in 1996 and continued to replace short-term notes with lower-cost Euro medium term note financing.

risks. By taking full advantage of market conditions, Ontario Hydro successfully launched its first Japanese bond issue in 1996 and continued to replace short-term notes with lower-cost term floating-rate financing, using its Euro medium term note program.

Assessing financial risks through advanced portfolio modeling has improved the precision of measuring our credit exposure to other companies. It has also facilitated advanced risk assessments of portfolios used in Treasury's risk management programs. The use of state-of-the-art risk monitoring systems resulted in

increased productivity and efficiency of operations and established the infrastructure necessary to prepare for both re-engineered and new financial instruments. The development and marketing of electricity derivatives will extend Ontario Hydro's capability to measure and manage risks in a deregulated electricity marketplace.

### Getting Ready for Energy Trading

Retailco and Genco are working with Treasury Division on an Energy Trading and Risk Management project to prepare all three groups for a competitive electricity market. This project will help to develop the skills and information technology products required to successfully trade energy in an open market. It will also contribute to the identification and mitigation of Ontario Hydro's exposure to price, volume, credit and market risks.

This cooperative project has several advantages: it pools limited resources to increase the project's cost-effectiveness; it will help to define how Retailco and Genco should relate to each other as parts of the same holding company; and it will help to define the role which Treasury should play as manager of the overall risk that will be assumed across the company.

### **Independent Power Producers**

Ontario Hydro was able to reduce its anticipated contractual costs by \$34 million in 1996 as a result of reduced independent power purchases from gas-fired generators. Careful contract management and unexpectedly high natural gas prices in northeastern North America allowed Ontario Hydro to curtail these purchases and realize the savings.

### International Revenues Rise

The investment of Ontario Hydro International Inc. (OHII) in Luz del Sur, the electricity distribution company serving the southern portion of Lima, Peru, continues to outperform all projections. With about

120,000 new customers connected since the acquisition in August 1994, the customer base has grown by more than 20 per cent. During the same period, energy losses declined from 20 per cent to just under 14 per cent, and Luz del Sur net income grew from US \$5 million to US \$44 million. In December 1996, the Government of Peru sold its 30 per cent holding in Luz del Sur in a domestic and international share offering. Trading values of these shares imply that OHII's original US \$53 million investment is now worth approximately US \$94 million.

With significant increases in deliveries of cobalt-60, a product largely used by the medical profession, 1996 was a banner year for the OHII-MDS Nordion Inc. relationship.

Compared with 1995, OHII reduced overheads, improved cost controls and lowered operating expenditures by 20 per cent. These savings, combined with dividends generated by the Luz del Sur investment and international sales of products and services, tripled OHII's cash from operations in 1996.

### Modernization of Customer Databases

In preparation for the coming competitive market, the Customer Solutions Group completely reorganized its wide range of customer and sales databases into a modern, efficient data warehouse. Then, in a highly innovative move, it integrated this data warehouse into the everyday computing environment of all Customer Solutions employees, using Lotus Notes. This system provides ease of use with sophisticated data security at a much lower price than competing systems. This trend-setting system is being adapted by other parts of Ontario Hydro and several external corporations.



Having proven their ability, adaptability and commitment, Hydro's employees face the future with confidence.

4

### Preparing Employees To Compete

Ontario Hydro's successful transition from monopoly to marketplace requires cultural changes within the Corporation that mirror, as closely as possible, the many economic and regulatory changes we face. This will not happen by accident, but rather through human resource planning and management that prepares employees to execute the overall corporate strategy and supports their continuing development.

employee recognition, diversity, executive development and health.

How well these initiatives work will be measured, in part, by the annual Workforce Capability Survey of management and employees. Information and insights gained from the 1996 survey have greatly assisted in identifying potential ability or expectation gaps and in fine-tuning "Healthy Competition" initiatives.

Ultimately, though, the readiness, willingness and

### "Healthy Competition"

"Healthy Competition" is a slogan used to describe a comprehensive framework The objective of "Healthy Competition" initiatives is to have a rejuvenated workforce that is highly motivated, capable, productive, innovative and adaptable to change.

that will ensure employees are "ready, willing and able" to succeed in a competitive environment. Its aim is to close any gap between where Ontario Hydro employees are today and where they need to be to prosper in the future. The objective is to have a rejuvenated workforce emerge from our restructuring, one that is highly motivated, capable, productive, innovative and adaptable to change. To foster these attributes, Ontario Hydro is keeping employees informed about new business directions and the rationale for change; conducting employee development discussions and providing managerial feedback and coaching; and focusing on the definition and communication of clear statements of accountability at all levels of the organization. Other "Healthy Competition" projects and programs cover areas such as labour relations,

ability of each Ontario Hydro employee is demonstrated by a consistent commitment to high-quality performance and a manifest desire to learn more, do more and reliably satisfy our customers' needs. These qualities are already abundantly represented at every level of our workforce and will become increasingly important competitive advantages for Ontario Hydro as a result of the coordinated human resource strategy now being implemented.

### Responding to Emergencies

The commitment and capability of Ontario Hydro's employees to manage emergencies was very much in evidence in 1996. Two examples of outstanding performance in critical and unplanned circumstances merit special recognition (see page 20).

### Hydroelectric Manages Stiff Challenges

It was the wettest spring in decades in some areas of Northern Ontario, putting Hydroelectric's maintenance, water management, dam safety and other professionals to the test. Their extraordinary efforts helped several communities avert or minimize flooding and flood damage. Water management staff at head office and in the field closely monitored water levels and kept communities informed, while maintenance crews put in long hours to keep sluices free of debris so that water could drain from the watershed as quickly as possible. Flooding and related damage was minimized because of these efforts. During last year's freshet on the Mattagami River the runoff that occurs in the spring - Ontario Hydro managed almost 100 million cubic metres of water above the flood peak. Similar efforts occurred on the Ottawa, Madawaska and Matabitchuan rivers.

### Fossil Demonstrates Reliability

Beginning in late April, and throughout the remainder of the year, Fossil staff was called on to make up for the loss of capacity resulting from the Pickering plant shutdown, and at the lowest possible cost. The plants quickly adjusted planned maintenance outages to permit maximum running time. Weekend and overnight production lulls were used to complete essential maintenance tasks. Both production and maintenance crews made outstanding efforts to maximize production and quickly return equipment to service when outages occurred. To meet this unexpected demand, fuel procurement and fuel handling staff managed double the normal volume of coal in the second half of the year. In addition to achieving much higher than planned energy production, which limited the availability of equipment for maintenance, the Fossil Business met its customer service target – an average long-term planned unit availability factor of 90 per cent.

### **Corporate Employee Awards**

Ontario Hydro is committed to recognizing and rewarding staff who make special contributions to the Corporation. Selecting the 1996 award-winners was not easy. In the



end, there were multiple winners in the four award categories.

The President's Award for Customer Excellence was intro-

duced in 1996 to highlight our renewed commitment to meeting customer needs and delivering superior service. Winners included Dave Watts of Energy Services, for his innovative approach to customer consultation on the 1997 pricing schedule and his

work on the Ontario Energy
Efficiency Consortium.

There were five winners of the
President's Sustainable Energy Development Champion
Award, including David Coates of Fossil's Lakeview
Generating Station. David led the energy-efficiency effort
that reduced the station's annual consumption by 54
gigawatt-hours, saving \$2 million per year.



TIPs Gold Awards go to employees whose suggestions save at least \$1 million over five years. Peter Keller and Al McLennan of Shared Services shared an

award for eliminating expensive packaging for pole mount transformers, saving \$1.4 million over five years.

The New Technology Award goes to an individual or group who develops a unique and innovative technology. One of the outstanding performers in 1996 was Alfred Mohino of Hydroelectric, for his custom-designed scaffold for inspecting hydroelectric propeller runners. It's one-tenth the price of the older, much larger version and cuts the time for each inspection by 90 per cent, saving Hydro about \$1.1 million.

### Health and Safety

Considerable corporate attention is paid to occupational health and safety, with gratifying results. The Retail Company, for example, has achieved an 80 per cent improvement in its lost-time accident severity rate over the last three years. This was achieved through a reduction in both the number of accidents and their average severity. In particular, employees at the Essex Operations centre have worked since February 1994 without a lost-time accident, while staff at the Alliston centre have worked safely since March 1993. Not to be outdone, Hydroelectric

ble of working with customers to analyze their precise needs and produce custom solutions, utilizing a broad slate of products and services from across the Corporation. In 1997, the division will establish a formal sales certification process to recognize and reward sales effectiveness and efficiency.

### Labour Relations

In October, management reached a mediated settlement for an unprecedented four-year agreement with the Power Workers' Union, which represents the majority of Ontario Hydro's employees. Both sides

deserve credit for painstakingly working through a daunting range of issues in

daunting range of issues in a climate of uncertainty about the future. Both made fruitful efforts to accommodate the most important needs and concerns of the other. And both share a conviction that the new agreement will help Optavio

needs and concerns of the other. And both share a conviction that the new agreement will help Ontario Hydro's ongoing transformation into a 21st-century utility that will continue to be one of the world's best

and will become one of its most successful.

# The goal is to make Ontario Hydro's sales staff the most highly qualified and effective in the province's energy industry.

improved its accident severity performance by more than 40 per cent in 1996 compared with the previous year. Fossil also registered improvements in several areas of safety performance, but its accident severity rate in 1996 was above target despite a consistent pattern of improvement from the beginning of September to the end of the year. During the year, Atikokan, Lambton and Lennox fossil stations marked the completion of one year without a lost-time accident. Safety also remains a critical aspect of GRID business, where Transmission Projects achieved the best safety record in the Corporation of any business with field staff.

### Sales Training

Targeted training opportunities address the need to acquire and expand skills identified as essential to Ontario Hydro's competitive success. Customer Solutions' Industrial Market Division, for example, continues to invest heavily in training in sales-related areas such as negotiations, financial analysis, presentation skills and proposal development. The goal is to make Ontario Hydro's sales staff the most highly qualified and effective in the province's energy industry, capa-



"The readiness, willingness and ability of each Ontario Hydro employee is demonstrated by a consistent commitment to high-quality performance, to learn more, and satisfy our customers' needs."

# Hydro's Competitive Advantage

Ontario Hydro is home to one of the world's great reservoirs of knowledge, experience and skill in utility operations and energy service applications. In an open energy marketplace, this matchless fund of expertise will grow in value as customers discover the difference it makes to their own competitiveness.



The Power of Change





Ontario Hydro's Commercial Account Executive Allan Fallis (second from left), with executive team from Oshawa Group, has proven the value of custom solutions in helping commercial businesses to save energy.



To retain and attract customers, we must offer them products and services that exceed their marketplace expectations.

### Creating Customer Value

Ontario's power customers want more than just kilowatt-hours delivered over the wires, just as telephone users want more than just a connection to the telecommunications network. To earn our customers and keep them, we have to add value beyond the meter. This is not a slogan. It is the key to our survival and growth as a business. Our customers want more control over how electricity is used and what it costs. They want to use electricity to save time, contribute to business success, make their lives more secure, more comfortable and more interesting. They want fast, reliable service and answers to their questions

business planning horizon. Based on what was learned in Phase 1, the Pricing Department produced a draft set of pricing proposals, which were sent to each participant. In Phase 2, the Pricing Department again met with the same groups

being represented. There was, nonetheless, a key

more flexibility, more choice and more individual

common message from all who participated: We want

control over our power costs. At the same time, there

was also a need for price and supply stability and pre-

dictability that was consistent with each customer's

and concerns. And they want to pay as little as necessary for all these benefits.

To earn our customers and keep them, we have to add value beyond the meter. This is the key to our survival and growth as a business.

to discuss the proposals.

Ontario Hydro's job is to do whatever it takes to deliver on these expectations. Here are just a few recent examples of our progress in reaching this goal.

### Pricing Consultation and New Price Offerings

In a unique and successful experiment, Ontario Hydro's Pricing Department engaged customers and stakeholders in an extensive two-phase consultation process prior to the setting of 1997 price offerings. Phase 1 was an exploration of customer perceptions about Ontario Hydro's pricing and what changes they felt would better help us fulfill their energy service needs. Predictably, these needs varied by region, by industry and by the main objectives of the group

As a result, Ontario Hydro's customers now have significantly more flexibility in fashioning their individual price and service portfolios. There are changes in the standard wholesale price for municipal utilities, as well as innovative pricing options such as Aggregation, U.S. dollar pricing and surplus power "Buy-through." The latter option allows Surplus Power customers to avoid interruptions by agreeing to pay a higher price for the duration of what would have been the interruption. Commercial and Residential Retention and Expansion prices are now available to municipal utilities to assist them in promoting local growth and to fend off fuel-switching, which erodes their customer bases.

### Better Service for Windsor-Area Auto Industry

The automotive industry is vital to Ontario's economic health, and meeting its large and complex energy service needs has always been a priority for Ontario Hydro, in cooperation with the many municipal utilities that serve specific sites across the province. In recent years, Chrysler, General Motors and Ford have invested heavily in modern plants in the Windsor area. As a result, the transmission and distribution facilities of Ontario Hydro and the Windsor Utilities Commission are no longer adequate to deliver the very high standards of reliability and power quality required by these advanced plants. To address this problem, Ontario Hydro's Industrial Market Division, in conjunction with GRID and the Windsor utility, moved very quickly to plan for a new 115 kV line and transformation facilities.

As with all new transmission lines, this one was not without controversy. Ontario Hydro has, nevertheless, done everything possible to secure its approval and, after considerable community consultation, it was decided that the line should be buried. This project is on schedule, and the line is expected to be in service in the summer of

1998. The outcome obviously benefits the Windsor area,

but it is also a signal to other large customers – existing and potential – that Ontario Hydro is a valuable ally who is eager to contribute to their business success.

### **Custom Solutions Project**

Tailoring services to the precise needs of each customer is the surest way to retain business in a competitive marketplace. This is the principle behind the piloting of Ontario Hydro's Custom Solutions project, a program designed to provide customers with a unique package of energy solutions that addresses their individual needs. These services could include:

• End-use pricing in which the customer pays for

agreed outcomes, such as compressed air delivered, a constant temperature in refrigerated areas or specific lighting levels, rather than for the electricity consumed to achieve these outcomes;

- Maintenance programs;
- Energy monitoring, analysis and benchmarking; and
- Increased reliability through the PowerSelect service, or any other products and services Hydro can provide.

Launched in 1996, the Custom Solutions project is currently focusing on commercial and industrial customers and expects to close a number of these innovative deals in 1997.

### Hydro Day at Falconbridge

Falconbridge Ltd., one of the world's leading mining and metals companies, has long been Ontario Hydro's largest direct customer. Over the years, as it has for other large customers, Hydro has helped Falconbridge become more competitive by improving its energy efficiency and fine-tuning its utilization of pricing options. In 1997, Falconbridge will enjoy a substantial reduction in its electricity bill and lower its production costs by taking advantage of the new aggregated pric-

The Windsor auto industry project represents a notable achievement for Ontario Hydro, the City of Windsor and the Windsor Municipal Utility.

ing option developed through customer consultation (see "Pricing Consultation and New Price Offerings," page 23) and by moving to a real-time pricing option. Ontario Hydro also maintains a full-time adviser on site at the company's main facility to assist in day-to-day concerns related to energy use.

To show its appreciation for this very successful partnership, the company sponsored "Hydro Day at Falconbridge" in June, inviting all customer service staff that work on the account. The day involved a tour of the mine and metallurgical site, lunch with plant executives and a presentation by the customer on its energy use and plans for the future.

### Retail Customer Services Improve As Electricity Prices Decline

Ontario Hydro's Retail Company serves customers in areas of the province not served by municipal electric utilities (MEUs) or other suppliers. Despite lower customer density than MEUs, Retailco has achieved cost reductions and productivity improvements that make it competitive with many municipal utilities.

On January 1, 1996, Retailco unbundled its pricing system into two parts: a charge for distribution services and a charge for energy consumed. The result is a more equitable billing system that better aligns customer prices with Ontario Hydro's costs to pro-

and that any scheduled work will be completed as agreed upon with the customer. If staff fail on any of these counts – except in circumstances outside Hydro's control, such as storms – the applicable charge will be waived. Initial customer response to this program has been very favourable.

### Supplier and Municipal Utility Partnerships

Establishing closer relationships with municipal utilities and suppliers and improving the overall purchasing process is an integral part of the company's purchasing and materials management strategy. As a purchaser of about \$700 million worth of goods and

services in 1996, even small reductions in these costs make a difference. Quality and the suppliers' service

# Ontario Hydro's Retail Company launched the first Service Guarantee available to electricity customers in Ontario, a concept destined to set the standard for customer service in the distribution sector.

duce and deliver energy and related services. Under the new system, over 90 per cent of those Retailco customers whose consumption remained stable in 1996 saw their annual electricity costs decline – some by as much as 11 per cent.

In addition to these savings, productivity improvements and more frequent reviews of service costs led to further decreases in the distribution charge for some customers. Approximately 54,000 residential and commercial urban-class customers saw a decrease of up to 19 per cent in their service charge, while close to 70,000 seasonal customers in more populous areas realized a 10 per cent reduction.

The Retail Company is committed to maintaining the high standards of service quality and reliability that its customers have come to expect. In 1996, Retailco became the first utility in Ontario to introduce a Service Guarantee. While the concept is simple, the guarantee sets the standard for customer service in the distribution sector. When our personnel schedule an appointment at a customer's property, they guarantee that they will arrive within the designated time period,

and reliability standards are equally important to Ontario Hydro's productivity. Corporate Services has built strategic partnerships with suppliers and utilities, and coordinates regular meetings with their key executives to discuss Ontario Hydro's future direction and procurement strategy.

#### ISO 9001 Certification

The Industrial Market Division within Customer Solutions achieved ISO 9001 certification in 1996, succeeding Meter and Relay Services, who were awarded ISO 9002 certification in 1995. ISO certification is an independent recognition of a commitment to quality that is tangible and measurable. The division accomplished this goal in about one-third of the usual time required to develop processes and documentation. ISO 9001 designation will help the division to gain recognition for superior customer service and to differentiate its products and services in a competitive marketplace.



6

### **Building New Markets**

Knowledge. Experience. Power. Ontario Hydro has much to offer the world. And we are confident that our people, our technologies and our business reputation are among the best. We look forward to competing in a vibrant, barrier-free North American marketplace. Freed from legislative constraints on market-driven behaviour and allowed to enter entirely new lines of business, Ontario Hydro's potential for growth, beyond the province it has served for 90 years, is vast. By every measure, we believe our next 90 years will be better than the first.

### Corporate Business Development

The identification and development of new business opportunities is the prime responsibility of the newly created Corporate Business Development Group, which succeeds the structure that included Ontario Hydro Technologies, Ontario Hydro International Inc. and the Convergence Project. Its mission is to

strengthen and expand Ontario Hydro's market share in energy products and services.

The Corporate Business Development Group is organized into four business functions:

 Technology Services and New Product Development will deliver Ontario Hydro's technical and engineering services. It will also assess and develop new technologies with commercial potential.

- Commercial Analysis and Venture Development will assess and develop the business case for investments, mergers, acquisitions, alliances and dispositions that will strengthen corporate finances and new business prospects. This mandate includes the commercialization of technologies, whether they come from inside or outside Ontario Hydro.
- The Global Energy Portfolio will oversee the diverse group of businesses in Ontario Hydro's investment portfolio.
- International and Industry Relations will coordinate industry liaison activities, such as the National Energy Roundtables, provide market research and manage overseas consulting contracts and corporate marketing.

The Corporate Business Development Group can draw on extensive experience from across the Corporation. Here is a sample of initiatives undertaken in 1996 to prepare for an open marketplace and to expand in existing ones.

Freed from legislative constraints on market-driven behaviour and allowed to enter entirely new lines of business, Ontario Hydro's potential for growth is vast.

### National Accounts Program

Ontario Hydro's National Accounts Program was created to target customers such as chain stores, banks, government institutions and property managers that have energy service needs at many different locations across Ontario and Canada, and perhaps in the United

States. These customers are presently treated as several medium-sized accounts rather than the single big account they really are. Ontario Hydro's research shows that these customers would benefit from additional services such as bill consolidation, rate verification, energy accounting, electrical inspection, end-use pricing, load monitoring, account executive services, benchmarking and power quality services. Providing services such as these will help Ontario Hydro retain these important customers when competition arrives and will give us the structural capacity to serve them outside our current franchise area.

### PowerSelect

Ontario Hydro's new PowerSelect Service provides customers with premium power quality products and services. Power quality has become increasingly important with the computerization of commercial and industrial equipment and the associated sensitivity to outages and voltage fluctuations. Capitalizing on Ontario Hydro's expertise in the power quality area,

long-term price stability, convenience and reliability. The community will see environmental improvements from the centralized system, which will also contribute to redevelopment of the city's business core.

### Fossil Fly Ash Sold To Produce Plastics

In a promising new market initiative, the Fossil Business provided key equipment and by-product to Composite Manufacturing Corporation in Brampton for the production of plastic shipping pallets. The manufacturing process, which went into full operation in November, combines fly ash from Hydro's Lakeview Generating Station with post-consumer plastics to produce pallets that are completely recycled and recyclable. This is believed to be the first such operation to run on a commercial scale in North America.

### **GRID Projects Profitable**

In 1996, Transmission Projects generated a profit for GRID from the private sector. Projects were conducted

on both lines and stations and included a full range of services, from design consultancy to full turnkey

# PowerSelect provides customers with power quality audits and analyses, recommended solutions, sourcing of premium power-quality equipment, installation, monitoring and training.

PowerSelect provides customers with power quality audits and analyses, recommended solutions, sourcing of premium power-quality equipment, installation, monitoring and training.

### District Energy for Windsor

In a joint venture with Unicom Thermal Technologies Inc. of Chicago, Ontario Hydro's Fossil Business will build, own and operate a heating and cooling plant to serve a new district energy system being developed by the Windsor Utilities Commission. All approvals were obtained and contracts signed in 1996. Benefits to customers, such as the new Windsor Casino complex, are reduced capital costs, operating savings,

projects. GRID continues to work with Ontario Hydro International Inc. on projects around the world, such as those currently under development in Indonesia.

### **Aquaculture Success**

Fish are making a big splash at our Bruce, Lakeview and Nanticoke plants – more than 400,000 of them. The results are promising for Ontario Hydro Technologies' (OHT) commercial aquaculture program, which was established in 1996. These operations draw on OHT's many years of experience in aquatics research and waterway management associated with the operation of generating stations. The program represents a potential business opportunity for Ontario Hydro.

### **OHT's Expanding Markets**

Ontario Hydro Technologies made great progress in 1996 in marketing its technical services and products to customers in the broader energy and industrial sectors. Sales in these external markets were \$15 million, a 50 per cent increase over the previous year. Some significant contracts included work for:

- Mexican power utility CFE, to do vibration monitoring;
- TransCanada Pipelines, for ultrasonic pipeline inspection; and
- EPB Blasting, for an innovative electric pulse rockblasting technology.

### OHII's Market Development

In keeping with the highest standards of safety and regulatory compliance, Ontario Hydro continues to expand its preeminent position as the world's number one commercial supplier of tritium. In 1996, Ontario Hydro International Inc. (OHII) opened up new markets with radiopharmaceutical companies, tritium light manufacturers and research facilities in the United States, Europe and South Africa.

OHII is also actively developing markets for its utility services worldwide. In strategic alliance with Chilquinta S.A. (OHII's partner in Peru), OHII is pursuing utility acquisition opportunities in selected countries of Latin America. Through the provision of Hydro's technical and managerial expertise, OHII is able to increase the efficiency of operations and improve financial performance in these utilities and hence increase the value of OHII's investment. As well, in Asia, OHII is proposing with Manitoba Hydro to provide Operations and Maintenance for the Bakun Hydroelectric Power Project in Sarawak, Malaysia. Working closely with local communities and partners, the team can contribute extensive power sector experience and capabilities to this major project.

### U.S. Subsidiary Launched

In July, Ontario Hydro incorporated Ontario Hydro Interconnected Markets Inc. (OHIM). The subsidiary will better satisfy the needs of our existing base of U.S. wholesale customers and will help expand our geographic reach in the world's largest energy market. In December, OHIM applied to the U.S. Federal Energy Regulatory Commission for a marketer licence that will allow it to sell power in the U.S. Currently, Ontario Hydro sells electricity at the U.S. border. We see great potential to build our markets in the northeast U.S., where electricity costs are higher.

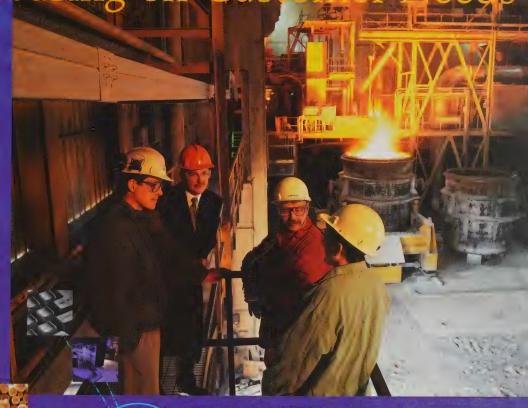
### Leveraging Hydroelectric Expertise

Ninety years of operating and maintenance experience with hydroelectric technologies helped Ontario Hydro to win domestic contracts with utilities and government agencies inside and outside of Ontario. Hydro's expertise in the areas of equipment overhauls, technical analyses, dam safety and management was instrumental in securing these contracts.

#### **Economic Development**

During 1996, Ontario Hydro expanded its role in promoting economic development in the province. Notable results include the new electric arc furnace at Dofasco and the COSMA truck frame plant in St. Thomas. Hydro contributed to the economic feasibility of both these projects by providing an attractive combination of products and services. Also in 1996, Ontario Hydro's Economic Development function, the Ontario Ministry of Economic Development, Trade and Tourism and the Economic Developers Council of Ontario cofounded "Team Ontario." Its goal is to foster economic development by encouraging companies to locate, invest and do business in Ontario. As part of its commitment to "Team Ontario," Ontario Hydro sponsors an annual Economic Development Achievement Award.

Focusing on Customer Needs



The Power of Change

New links are continuously added to the electricity value chain as advancing technologies give utilities and their customers more control over their power use, what it costs, and how it can be provided.

Ontario Hydro's goal is to offer a customized and competitively priced package of energy solutions to every individual customer.



Encouraging continued investment in Ontario. Cliff Poyton (second from left), Ontario Hydro's Dofasco Account Executive, with Dofasco workers at the electric arc furnace operation in Hamilton, Ontario.

# 7

### Sustainable Development

For any business that plans for future success, competitiveness and sustainability are compatible and mutually reinforcing goals. For Ontario Hydro, sustainability is the pursuit of operational excellence that builds on the efficient use of resources, continuous improvement in environmental performance and diversification of products and services. We believe that the competitive standard in the utility industry of the future will be set by those who see environmental leadership as a business opportunity.

Our sustainable development activities are designed to underscore and strengthen corporate relationships linking financial,

environmental and human resource management performance. Our strategy is to continuously improve environmental performance, using specific performance objectives and targets to set corporate expectations and to measure our progress towards sustainability.

As the framework for a competitive power industry in North America takes shape, we join with those who stress that lower-cost energy must not come at the expense of environmental quality.

There is reason to believe that electricity industry competition will foster the adoption of renewable energy technologies. Early signals from the U.S. show an encouraging uptake of "green power" options by customers, even at additional cost. If sustained, this trend could lead to renewable energy technologies

being part of a competitive supply portfolio. Our fiveyear Renewable Energy Technologies program, now in its third year, will keep Ontario Hydro up to date with practical and economic applications.

### **Energy Savings Successes**

Established in 1994, Hydro's In-House Energy Savings Program has greatly exceeded expectations. To date, the Corporation has achieved combined energy savings of over 1.25 billion kilowatt-hours per year, representing about \$50 million in savings annually.

Hydro joins with those who stress that lower-cost energy must not come at the expense of environmental quality.

The reduction in energy consumption has also significantly reduced atmospheric emissions from fossil-fired plants, particularly carbon dioxide.

Ontario Hydro celebrated its energy-saving milestone with a corporate donation to enhance energy efficiency at Ronald McDonald houses, and another to set up university scholarships in energy-efficiency studies.

### Tall Grass Prairie Regeneration

The tall grass prairie habitat, which contains some of the rarest plants found in Ontario, was once fairly widespread in the southwestern region of the province, but only isolated examples exist today. A significant feature of this plant community is its ability to inhibit the growth of woody vegetation, thereby contributing to the security of overhead electricity lines. In 1996 Ontario Hydro, together with the University of Water-loo, undertook a program to investigate techniques for establishing tall grass prairie habitat along transmission rights-of-way (ROW). If successful, this initiative will help restore a highly endangered ecosystem while reducing Ontario Hydro's long-term ROW maintenance costs.

### **Reducing Emissions**

The Fossil Business helped launch the Pilot Emission Reduction Trading Project (PERT), Canada's first such initiative, which focuses on emissions of nitrogen

Sustainable development is not just an environmental issue. It is an increasingly measurable influence on Ontario Hydro's bottom line.

oxides and volatile organic compounds. As a founding member of PERT – a group of industries, governments, environmental and health organizations – Fossil registered nitrogen oxide emission reduction credits achieved through modifications to the Lambton and Nanticoke plants. It also purchased credits from other participants and a Michigan utility to help demonstrate how such a program could work on a long-term basis. In June, installation of new burners in Nanticoke Unit 7 was completed, with a resulting 25 per cent reduction in nitrogen oxide emissions from the unit.

### Recycling and Reusing

One of the most significant recycling projects ever undertaken by GRID was completed at the Buchanan transformer station in London in 1996. Almost 1.8 million kilograms of copper and steel from old, unused equipment was removed, cut up and sold to a U.S. purchaser. In addition to the recycling of this huge volume of metal and the oil from the spare transformers, the initiative contributed to internal energy and financial savings for Ontario Hydro.

Corporate Services' office recycling program,

begun in early 1996, was also a success. A total of 67 per cent of all office waste materials at Head Office was recycled and diverted from landfill, a 22 per cent increase in saved resources over previous years. Revenues from the recycled materials are more than paying for the program.

### **PCB** Destruction

The continued use of PCBs is under scrutiny by all levels of government. Voluntary destruction targets have been established by the Province, and Ontario Hydro is expected to take a leadership role. In

response to this challenge, Hydro has formulated a strategy to destroy its PCBs

in a safe, environmentally conscious and cost-effective manner. The PCB Management Strategy requires, in part, that 85 per cent of all in-storage PCB waste and high-level in-service PCBs be destroyed by 2005.

In support of this strategy, in 1996 Ontario Hydro's business units, with Corporate Services, undertook major PCB removal and destruction projects amounting to about \$3 million.

#### Pollution Prevention

The Retail Company is now using wooden distribution poles treated with chromated copper arsenate rather than pentachlorophenol. Steel poles continue to be gradually introduced into the distribution network for selected applications. These changes have resulted in a reduction in pentachlorophenol releases to the environment. In addition, Retailco's strategic alliance with a pole supplier allows for used poles to be reclaimed and manufactured into alternative products.

### Renewing the Renewable Experience

Hydroelectric's new regional headquarters in Thunder Bay is a showcase of renewable technology that will consume less energy at a lower cost. The facility, which officially opened its doors in 1996, is one of the most innovative and energy-efficient of its kind, featuring light shelves, shaft lights, a solar wall, motion sensors, solar water heating, and more. The energy efficiencies to be derived from landscaping were also taken into consideration, with shade trees, wind breaks and minimal asphalt to reduce the amount of heat lost and absorbed within the building.

### **Aboriginal Affairs**

Ontario Hydro continues to work to improve relationships with the province's Aboriginal communities. During 1996, settlement agreements were achieved with the First Nations of Michipicoten and Fort William, and ongoing negotiations with 13 others progressed. Work with the Wabaseemoong First Nation on the One Man Lake Cemetery Project is an example of improving relationships. The First Nation manages the project with the assistance of the Canadian Executive Services Organization and funding from Hydroelectric.

Ontario Hydro communicates and consults with major Aboriginal organizations on an ongoing basis. We recognize Aboriginal business successes by supporting programs such as the Nishnawbe-Aski Business Awards, Northern Ontario Business Awards and National Aboriginal Achievement Awards. Hydro is also pursuing supplier contracts and other business relationships wherever mutual benefits may result.

### International Sales of Sustainable Development Expertise

Ontario Hydro International Inc. is successfully marketing Hydro's widely recognized expertise in Integrated Resource Planning (IRP). This is a planning process in which a community's future power supply and reliability needs are studied by a team of customers, stakeholders and the utility. Their goal is to develop a sustainable solution that is the most economic and has the least impact on the environment. Building on the

reputation of work done for Companhia Energetica de Minas Gerais in Brazil, Ontario Hydro was invited to provide IRP training to four Brazilian energy agencies serving Sao Paulo state. In Peru, OHII provided general environmental management training and a framework for conducting Phase I Environmental Site Assessments for Luz del Sur. In Hungary, it initiated a World Bankfunded project to prepare an Environmental Master Plan for the Hungarian electrical utility, MVMRt.

### The Bottom Line

Sustainable development is not just an environmental issue. It is an increasingly measurable influence on Ontario Hydro's bottom line. Examples of the convergence between business and sustainable development principles include: reducing operating costs through resource use efficiency; being responsive to environmental legislation; minimizing future environmental liabilities; and using strategic partnerships to achieve business objectives and develop new opportunities. Ontario Hydro's adoption of ISO 14001 as the benchmark for environmental management systems will help us realize these benefits.

In many more ways than these, there is a parallel relationship between competitiveness and sustainability at Ontario Hydro. Our need to continuously reduce costs, for example, compels the company to look for ways in which environmental improvements can yield benefits such as materials savings from more complete processing, reusing and recycling, as well as lower product costs from material substitution.

Ontario Hydro 1996 Annual Report

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remaining five were taken out of service. The faulty valve, which was discovered during routine testing, was repaired, and five units were returned to operation during 1996. Of the remaining three units, one is expected to be returned to operation in the first quarter of 1997, and two are undergoing planned outages.

### Fuel Used for Electric Generation

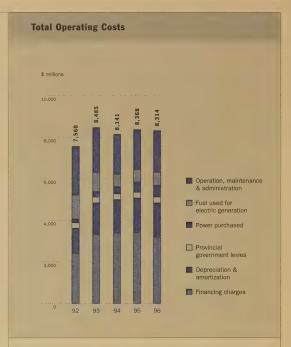
The cost of fuel used for electric generation in 1996, comprising the costs for coal, uranium, oil and water rental payments other than to the Province of Ontario, amounted to \$615 million, an \$8 million increase over 1995. The increase reflects the displacement of nuclear production by higher-cost fossil production due to the Pickering Nuclear Generating Station outages. Overall, internal generation in 1996 of 134,277 million kilowatthours was lower than generation in 1995 of 137,855 million kilowatthours as a result of increased contracted purchases from independent power producers.

#### Power Purchased

In 1996, electricity purchases increased to \$571 million, \$76 million or 15% higher than in 1995, as a result of an increase in contracted generation from independent power producers. Of the total power purchases, \$482 million was from independent power producers located in Ontario compared with \$428 million in 1995. Ontario Hydro also buys electricity when it is economical to do so, during periods of peak demand or in emergencies, and to manage acid gas emission levels.

#### Provincial Government Levies

Provincial government levies totalled \$282 million in 1996, a slight reduction from \$283 million in 1995. Ontario Hydro is required to pay to the Province of Ontario an annual debt guarantee fee of one-half of one per cent on the total debt guaranteed by the Province outstanding on the preceding December 31. The fee for 1996, based on guaranteed debt outstand-



ing as at December 31, 1995, was \$162 million, \$8 million lower than in 1995, as guaranteed debt levels were lower than at the 1994 year end.

Provincial water rental payments, related to Ontario Hydro's use of provincial waters in the operation of its hydroelectric stations, amounted to \$120 million in 1996, an increase of \$7 million from 1995. The higher generation was due to a high spring freshet in 1996.

Ontario Hydro paid approximately \$222 million to various government agencies for provincial sales taxes, Unemployment Insurance Commission premiums, Canada Pension Plan contributions, Employer Health Tax payments and payments in lieu of realty taxes.

### **Depreciation and Amortization**

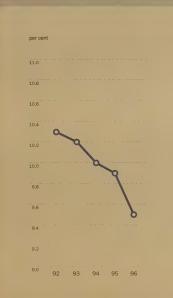
Depreciation and amortization charged to operations totalled \$1,656 million in 1996, an increase of \$16 million or 1% over 1995, as a result of a higher average level of in-service assets throughout 1996.

#### **Financing Charges**

Financing charges comprise interest charged to operations and foreign exchange costs. Interest charged to operations represents gross interest reduced by capitalized interest and interest earned on investments. Foreign exchange costs comprise amounts related primarily to the amortization of exchange gains or losses on the principal amount of foreign debt and foreign exchange risk management activities.

Interest and foreign exchange charged to operations was \$3.182 million in 1996, \$245 million or 7% lower than in 1995. Favourable impacts due to the reduction in long-term debt outstanding and the lower weighted average interest rate on long-term debt were partially offset by reductions in interest capitalized and investment income, as well as a higher level of accrued provisions. Foreign exchange costs for 1996 increased \$28 million, primarily due to reduced gains from foreign exchange risk management activities.

#### Weighted Average Interest Rate on Long-Term Debt



#### **Financial Indicators**

The Corporation's financial performance is monitored using two main indicators: interest coverage ratio and debt ratio.

The level of interest coverage measures the extent to which net income enables Ontario Hydro to meet its gross interest payments. An increase in the interest coverage ratio indicates a strengthening in the Corporation's financial position. The 1996 level of interest coverage, based on income before corporate writeoffs, remained unchanged from 1995 at 1.19. The level of interest coverage based on the net loss for the year is 0.35 due to the corporate write-offs.

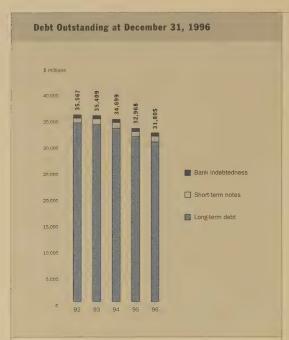
The debt ratio measures the extent to which Hydro's assets are financed by debt. A reduction in the debt ratio indicates a strengthening in financial position, as a relative increase in equity provides additional financial flexibility. The debt ratio at the end of 1996 was 0.930, compared with the 1995 ratio of 0.886. The deterioration in 1996 was due to the corporate write-offs, partially offset by a lower level of debt outstanding at the end of 1996.

## FINANCING AND INVESTING ACTIVITIES Financing and Capital Markets

Ontario Hydro's cash from operations in 1996 was sufficient to cover capital expenditures for 1996 and to reduce the level of outstanding debt. Gross borrowing was required primarily for refinancing maturing issues and also to take advantage of opportunities to minimize interest rates.

In 1996, on a cash basis, there was a net debt reduction of \$1,533 million compared with a net debt reduction of \$1.686 million in 1995.

Proceeds of \$2,417 million were received from the issuance of debt for long-term financing in 1996, compared with \$2,494 million in 1995. The 1996 debt issues include a \$38-million Canadian dollar Euro medium term note (EMTN) issue at 8.56%; two



30-year \$500-million Canadian bond issues at 8.25%; a five-year \$40-million Canadian EMTN issue at 8%; a two-year 100-million New Zealand-dollar EMTN (\$95 million Canadian) at 8.75%; a 12-year 40-million United States-dollar EMTN (\$55 million Canadian) at a coupon rate that increases every two years, from 7.20% in years one and two to 8.10% in years 11 and 12; a three-year 50-billion-Yen/568-million Australiandollar dual-currency bond issue (\$608 million Canadian) at 5.45%; a 20-million US-dollar extendable EMTN (\$27 million Canadian) with a maximum term of 12 years at a step-up coupon rate that starts at 7% in years one and two and increases every year thereafter to 8% in year 12; and the issuance of Canadian short-term notes and United States dollardenominated commercial paper. All EMTN issues and the Yen bond issue were fully swapped into floating rate liabilities.

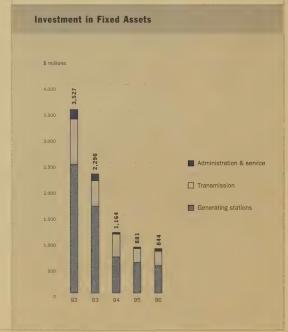
In 1996, \$5,324 million of cash was used to retire debt issued for long-term financing, compared with \$2,951 million in 1995. At the end of 1996, \$663 million

of short-term notes were allowed to mature. These notes were re-issued at the beginning of 1997. This compares with \$2,395 million of debt redeemed or allowed to mature at the end of 1995 and re-issued in 1996. Cash paid on settlement of swaptions amounted to \$358 million in 1996. There was no cash settlement of swaptions in 1995.

#### **Investment in Fixed Assets**

Ontario Hydro invests in fixed assets to maintain service, reliability, safety and environmental performance, and to meet regulatory requirements. The total assets of the Corporation at the end of 1996 were \$39,870 million, 92% of which represented fixed assets in service or under construction.

The cash required by Ontario Hydro to finance its investment in fixed assets came from two major sources: operations and financing through borrowing. As was the case in 1995, sufficient cash was generated from operations in 1996 to finance investment in fixed assets, as well as reduce debt outstanding.



Cash used for investment in fixed assets during 1996 was \$868 million compared with \$932 million in 1995. Including changes in non-cash balances related to fixed assets, investment in fixed assets totalled \$844 million in 1996 and \$881 million in 1995. The decrease from 1995 reflects continuing capital reductions in the ongoing effort to reduce costs. Continued emphasis is being placed on safety, reliability and environmental performance, and the need to make strategic investments to position the Corporation for competition while containing the overall level of capital expenditures. Of the total investment, \$526 million was spent on generating facilities and \$274 million was invested in major transmission and distribution facilities.

#### OUTLOOK

#### **Financial**

In 1993, Ontario Hydro committed to keeping the all-customer average rate change to no greater than the rate of inflation for the balance of the decade. Following a rate freeze in 1994, average rate decreases of 0.1% were implemented in each of 1995 and 1996, and no rate increase will be implemented in 1997. Ontario Hydro is committed to no average rate increase through 1999. These actions are expected to result in a real rate reduction of about 9% between 1993 and 1999.

Ontario Hydro continues to pursue its ongoing financial improvement strategy of reducing costs in its core business areas; reinvesting in the nuclear generators to enable nuclear generation to return to acceptable levels of operation and, ultimately, to achieve excellence in its nuclear operations; and investing in other strategic areas required to position the Corporation for growth in new revenue areas, as well as those required to develop the market infrastructure and facilitate full commercial readiness for retail access. In addition to reductions in operation, maintenance and administration costs, interest and foreign exchange

costs are also expected to decline significantly, primarily due to the effect of paying down the Corporation's debt. Offsetting these reductions are increases in costs of power puchased from independent power producers, some growth in fixed charges due to ongoing capital investment, and increased allowance for the cost contingency due to uncertainties in the economic and the competitive electricity market environments.

Hydro's current plans forecast net income levels of approximately \$740 million in 1997, increasing to approximately \$894 million by 1999. Forecasted revenues for 1997 are based on the most likely primary sales forecast of 134.5 million kilowatt-hours. For 1998 and 1999, forecasted sales are projected to hold flat at levels forecasted for 1997 to recognize the potential impact of competition and uncertainty in load.

The capital investment level in fixed assets is projected to remain between \$1.1 billion and \$1.2 billion in each year over the period from 1997 to 1999. Cash generated from operations between 1997 and 1999 is expected to exceed cash required for investment in fixed assets. As a result, the level of debt outstanding, comprising long-term debt, short-term notes and bank indebtedness, is expected to be reduced from a level of \$31.8 billion at the end of 1996 to \$27.8 billion by the end of 1999, a reduction of \$4.0 billion. The debt ratio is expected to improve from 0.93 at the end of 1996 to 0.88 by the end of 1999.

#### **Industry Restructuring**

Across the North American continent, the business of generating, transmitting and distributing electricity is currently undergoing significant change. Traditional monopolies are being broken, and corporate structures that have stood the test of time are becoming obsolete. Customers are expecting to have meaningful choices as to which entity will generate and deliver their power. Ontario cannot shelter itself against these fundamental industry changes.

It is Hydro's view that significant changes will have to be made in Ontario's electricity industry to allow for the introduction of full competition and the inclusion of Ontario's electricity industry within the greater North American whole. These changes will require an orderly migration from the old monopoly structure to a new open-access competitive structure.

Within the context of these uncontrollable changes, Hydro finds itself burdened with too much debt and a resulting over-leveraged financial structure. Capital investments and commitments made in prior years to meet projected load growth under a stable industry structure may prove not to be recoverable, when considered in terms of a future open, competitive market.

Moreover, since its formation over 90 years ago, Ontario Hydro has had the mandate to supply, upon demand, the electricity requirements of all Ontario customers. Hydro, which is not subject to income taxation, has met its customers' electricity needs at cost. As such, Hydro's electricity prices have not included any provision for profit above that needed to maintain financial soundness. To meet the predicted electricity needs of all of its customers, Hydro has developed its existing asset base. In common with most other North American government-owned public utilities, this has resulted in a highly leveraged financial structure for the Corporation.

The Advisory Committee on Competition in Ontario's Electricity System (i.e., the Macdonald Committee) was asked to make recommendations on the options for phasing in competition in Ontario's electricity industry. The committee presented its report to the Ontario government in May 1996, and included among its recommendations the dissolution of Hydro's generation and transmission monopoly and the introduction of legislative and financial reforms. The committee estimated that a \$15-billion reduction in the Corporation's existing debt load would be nec-

essary to restructure Hydro along more commercial lines to offset unrecoverable assets.

In recognition of the directional shifts within the North American industry, Ontario Hydro has been moving toward a more commercial mode of operation for several years now, commencing with the internal restructuring efforts undertaken in 1993, and continuing to the present. Additional organizational, legislative and financial restructuring will have to occur prior to the introduction of full competition in Ontario. The specific nature of the changes to be made will require significant additional study and consultation, all within a short time frame.

Hydro is actively evaluating the effects of potential future industry structures on its operations. To be fully commercially viable in a restructured electricity industry, Hydro has estimated that it can support a level of debt that is between \$10 billion and \$21 billion less than current levels. An estimate of \$16 billion in such potentially stranded debt has been used for strategic discussion purposes. Of this amount, \$2 billion represents assets and uneconomic power purchase commitments from independent power producers, which may not be recoverable. The amount of actual stranded debt is subject to the considerable uncertainties of the future industry environment.

Based on the proposed and actual treatment of other North American utilities, Hydro expects that an acceptable mechanism or mechanisms can be put in place to discharge stranded debt. Possible mechanisms include a debt to equity conversion, an exit fee imposed on departing customers, a transition charge collected as a component of transmission tariffs, or a transition charge collected as a surcharge on distribution tariffs. It is forecast that total stranded debt can be discharged over a reasonable time frame without the need for rate increases.

## Management Report

# Management's Responsibility for Financial Reporting

The accompanying financial statements of Ontario Hydro are the responsibility of management and have been prepared in accordance with accounting principles generally accepted in Canada, applied on a basis consistent with that of the preceding year. Ontario Hydro chooses accounting principles appropriately selected to its circumstances. The significant accounting policies followed by Ontario Hydro are described in the Summary of Significant Accounting Policies contained in note 1 to the financial statements. The preparation of financial statements necessarily involves the use of estimates based on management's judgment, particularly when transactions affecting the current accounting period cannot be finalized with certainty until future periods. The financial statements have been properly prepared within reasonable limits of materiality and in light of information available up to February 18, 1997. The information presented elsewhere in the Annual Report is consistent with that in the financial statements.

Management maintains a system of internal controls designed to provide reasonable assurance that the assets are safeguarded and that reliable financial information is available on a timely basis. The system includes formal policies and procedures and an organizational structure that provides for appropriate delegation of authority and segregation of responsibilities. An internal audit function independently evaluates the effectiveness of these internal controls on an ongoing basis and reports its findings to management and the Audit/Finance Committee of the Board of Directors.

The financial statements have been examined by Ernst & Young, independent external auditors appointed by the Lieutenant-Governor-in-Council of Ontario. The external auditors' responsibility is to

express their opinion on whether the financial statements are fairly presented in accordance with generally accepted accounting principles. The Auditors' Report, which appears on page 42, outlines the scope of their examination and their opinion.

The Board of Directors, through the Audit/Finance Committee, is responsible for ensuring that management fulfils its responsibilities for financial reporting and internal controls. The Audit/Finance Committee meets periodically with management, the internal auditors and the external auditors to satisfy itself that each group has properly discharged its respective responsibility, and to review the financial statements before recommending approval by the Board of Directors. The external auditors have direct and full access to the Audit/Finance Committee, with and without the presence of management, to discuss their audit and their findings as to the integrity of Ontario Hydro's financial reporting and the effectiveness of the system of internal controls.

On behalf of Management,

President & Chief Executive Officer

Executive Vice-President, Corporate Business Development &

Chief Financial Officer

Toronto, Canada, February 18, 1997

# Auditors' Report

#### To the Board of Directors of Ontario Hydro:

We have audited the consolidated statement of financial position of Ontario Hydro as at December 31, 1996 and the consolidated statements of operations and changes in cash position for the year then ended. These financial statements are the responsibility of Ontario Hydro's management. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with generally accepted auditing standards. Those standards require that we plan and perform an audit to obtain reasonable assurance whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting

principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation.

In our opinion, these consolidated financial statements present fairly, in all material respects, the financial position of Ontario Hydro as at December 31, 1996 and the results of its operations and the changes in its cash position for the year then ended in accordance with generally accepted accounting principles.

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Toronto, Canada, February 18, 1997

	1996	1995
Revenues		
Primary power and energy		
Municipal utilities	5,857	5,899
Retail customers	1,647	1,635
Direct industrial customers	903	914
	8,407	8,448
Secondary power and energy (note 2)	172	233
Other revenues	307	315
	8,886	8,996
Costs		
Operation, maintenance and administration	2,008	1,916
Fuel used for electric generation	615	607
Power purchased	571	495
Provincial government levies (note 3)	282	283
Depreciation and amortization (note 4)	1,656	1,640
	5,132	4,941
Income before financing charges and corporate write-offs	3,754	4,055
Financing charges (note 5)	3,182	3,427
Income before corporate write-offs	. 572	628
Corporate write-offs (note 6)	2,560	-
Net (loss) income	(1,988)	628

See accompanying notes to financial statements.

ASSETS	1996	1995
Fixed assets (note 7)		
Fixed assets in service	49,266	50,485
Less accumulated depreciation	13,608	12,662
	35,658	37,823
Construction in progress	1,160	1,476
	36,818	39,299
Current assets		
Accounts receivable	1,082	1,144
Fuel for electric generation (note 8)	368	377
Materials and supplies, at cost	311	282
	1,761	1,803
Other assets		
Deferred debt costs	779	840
Deferred pension costs (note 17)	131	149
Deferred demand management costs, net of		
accumulated amortization (note 6)	-	411
Long-term accounts receivable and other assets	381	482
	1,291	1,882
	39,870	42,984

See accompanying notes to financial statements.

LIABILITIES	1996	1995
Long-term debt (note 9)	28,588	28,726
Current liabilities		
Bank indebtedness (note 10)	644	604
Accounts payable and accrued charges	1,025	1,007
Short-term notes payable	1,091	934
Accrued interest	772	879
Long-term debt payable within one year (note 9)	1,482	2,704
	5,014	6,128
Other liabilities		
Unamortized swaption premiums (note 11)	308	657
Long-term accounts payable and accrued charges	807	514
Accrued fixed asset removal and used nuclear fuel		
disposal costs (note 13)	2,601	2,419
	3,716	3,590
CONTINGENCIES & COMMITMENTS (notes 11 & 14)		
Еquity		
Retained earnings (note 15)	2,552	4,540
	39,870	42,984

On behalf of the Board,

Chairman, Board of Directors

Toronto, Canada,

President & Chief Executive Officer

February 18, 1997

	1996	1995
Operating activities		
Net (loss) income	(1,988)	. 628
Adjust for non-cash items		
Depreciation and amortization	1,656	1,640
Corporate write-offs	2,560	_
Amortization of foreign exchange gains and losses	57	55
Provision for used nuclear fuel disposal costs	59	73
Other	(30)	63
	2,314	2,459
Change in non-cash balances related to operations (note 16)	(86)	20
	2,228	2,479
Financing activities		
Debt for long-term financing		
Issued	2,417	2,494
Retired	(5,324)	(2,951)
	(2,907)	(457)
Redemption of debt for long-term financing, net of reissuances	1,732	(1,229)
Cash paid on settlement of swaptions	(358)	_
·	(1,533)	(1,686)
Investing activities		
Fixed assets	(868)	(932)
Other assets	133	138
	(735)	(794)
Change in cash position during the year	(40)	(1)
Bank indebtedness at beginning of year	(604)	(603)
Bank indebtedness at end of year (note 10)	(644)	(604)

See accompanying notes to financial statements.

## Notes to Financial Statements

#### 1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

The accompanying financial statements have been prepared in accordance with accounting principles generally accepted in Canada, applied on a basis consistent with that of the preceding year. The significant accounting policies followed by Ontario Hydro are described below.

#### a) Rate setting

Ontario Hydro has broad powers to generate, supply and deliver electric power throughout the Province of Ontario. The Corporation operates under the Power Corporation Act and is subject to the provisions of the Ontario Energy Board Act.

Under the provisions of the Power Corporation Act, the price payable by municipal and other customers for power is the cost of supplying the power. Such cost is defined in the Act to include the cost of operating and maintaining the system, the cost of energy conservation programs, depreciation, interest, and the annual amounts for debt retirement and stabilization of rates and contingencies. The annual amounts for debt retirement and stabilization of rates and contingencies are accounted for as net income.

Under the provisions of the Ontario Energy Board Act, a public hearing before the Ontario Energy Board is required to review any changes in electricity rates proposed by Ontario Hydro which affect its municipal utilities, direct industrial customers, or, if the Minister of Energy so directs, rural retail customers. The Ontario Energy Board then submits its recommendations to the Minister of Environment and Energy. After considering the recommendations of the Ontario Energy Board, Ontario Hydro's Board of Directors, under the authority of the Power Corporation Act, establishes the electricity rates to be charged to customers.

The Board of Directors may specify that an amount related to an item be included in electricity rates of a period which differs from the period in which it would be recognized under generally accepted accounting principles for enterprises operating in a non-rate-regulated environment. If so, the accounting treatment given the item is the same as its treatment for rate-setting purposes. This authority of the Board of Directors may be used in respect of a specific transaction or an accounting policy.

Ontario Hydro's accounting policies relating to discounts and premiums arising from the acquisition of debt prior to maturity and foreign exchange gains and losses on United States dollar-denominated short-term financing replacing United States dollar-denominated long-term debt which has been redeemed prior to maturity, reflect the rate-setting treatment of these items as specified by the Board of Directors. Under generally accepted accounting principles for enterprises operating in a non-rate-regulated environment, these amounts would be included as gains or losses of the current period. The Board of Directors has used its rate-setting authority to specify that costs of the rehabilitation program for steam generators at Pickering "A" and "B" and Bruce "A" Nuclear Generating Stations shall be deferred for recovery in future periods. Under generally accepted accounting principles for enterprises operating in a non-rate-regulated environment, these costs would be expensed as incurred. The Board of Directors has also used its rate-setting authority to specify that the nuclear recovery expenditures planned to be incurred over the period 1997 to 2001 shall be charged to operations in 1996. Under generally accepted accounting principles for enterprises operating in a non-rate-regulated environment, these costs would be expensed as incurred.

#### b) Consolidation

The consolidated financial statements include the financial statements of Ontario Hydro and its wholly-owned subsidiaries Ontario Hydro International Inc. (OHI Inc.) and Ontario Hydro Interconnected Markets Inc. (OHIM Inc.). OHI Inc. was incorporated under the Ontario Business Corporations Act and was established as a subsidiary of Ontario Hydro in September 1993. OHIM Inc. was incorporated on July 9, 1996 under the General Corporation Law of the State of Delaware in the United States. Both OHI Inc. and OHIM Inc. publish separate financial statements.

#### c) Fixed assets

Fixed assets in service include operating facilities and non-operating reserve facilities, and heavy water held for use in nuclear generating stations. Construction in progress includes fixed assets under construction.

#### 1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

Fixed assets are capitalized at cost which comprises material, labour, engineering costs, overheads, depreciation on service equipment, interest applicable to capital construction activities, and for new facilities, the costs of training initial operating staff. In the case of generating facilities, the cost also includes the net cost of commissioning which comprises the cost of start-up less the value attributed to energy produced by generation facilities during their commissioning period. For multi-unit facilities, a proportionate share of the cost of common facilities is placed in service with each major operating unit. The cost of heavy water comprises the direct cost of production and applicable overheads, as well as interest and depreciation on the heavy water production facilities and the estimated removal costs of these facilities. Leases which transfer the benefits and risks of ownership of assets to Ontario Hydro are capitalized.

Interest is capitalized on construction in progress at rates (1996 - 9.9 per cent; 1995 - 10.1 per cent) which approximate the average cost of all long-term funds borrowed. If the construction period of a project is extended and the construction activities are continued, interest is capitalized during the period of extension provided that the project has a reasonable expectation of being completed.

If a project is deferred as a result of a management decision and there is a reasonable expectation of completion, interest capitalization ceases and amortization for any loss in value commences.

If a project is cancelled or deferred indefinitely with a low probability of resuming construction, all costs, including the costs of cancellation, are written off to operations.

If fixed assets are removed from operations and mothballed for future use, the costs of mothballing are charged to operations. These assets are classified as non-operating reserve facilities.

#### d) Depreciation

The capital costs of fixed assets in service are depreciated on a straight-line basis, with the exception of heavy water held to replace losses occurring during the operation of Ontario Hydro's nuclear generating stations. Heavy water held for this purpose is depreciated on a sinking fund basis over the period through to the first year heavy water from an out-of-service nuclear station is estimated to be available for replacement purposes.

Depreciation rates for the various classes of assets are based on their estimated service lives. Major components of fossil and nuclear generating stations are depreciated over the lesser of the service life expectancy of the major component or the remaining service life of the associated generating station; for hydroelectric generating stations, major components are depreciated over the service life expectancy of the component, ranging from 25 to 100 years. Heavy water in nuclear generating stations is depreciated over the remaining service life of the associated station. The estimated service lives of assets in the major classes are:

Generating stations – fossil	– 40 years
– nuclear	– 40 years
Transmission and distribution facilities	- 10 to 100 years
Administration and service facilities	– 5 to 50 years

In accordance with group depreciation practices, for normal retirements the cost of fixed assets retired is charged to accumulated depreciation with no gain or loss reflected in operations. However, gains and losses on sales of fixed assets and losses on premature retirements are charged to operations in the year incurred as adjustments to depreciation expense.

When the costs of removal less residual value on retirements of fixed assets can be reasonably estimated and are significant, provisions for these costs are charged to depreciation expense on an annuity basis over the remaining service life of the related fixed assets. Removal costs that are provided for include the estimated costs of decommissioning nuclear and fossil stations and the estimated costs of removing certain nuclear reactor fuel channels. Other removal costs are charged to depreciation expense as incurred.

The estimated service lives of fixed assets and the significant assumptions underlying the estimates of fixed asset removal costs are subject to periodic review. Any changes arising out of such a review are implemented on a remaining service life basis from the year the changes can first be reflected in electricity prices.

Non-operating reserve facilities are amortized so that any estimated loss in value is charged to depreciation expense on a straight-line basis over their expected non-operating period.

#### 1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

#### e) Heavy water sales

Ontario Hydro has produced sufficient quantities of heavy water to meet future needs of its existing nuclear generating stations and is now producing heavy water for sales to external parties. Revenues from external sales contracts requiring the production of heavy water far in advance of delivery dates are recognized on a percentage-of-completion basis and revenues from all other heavy water sales are recognized at the point of sale. Resulting profits or losses are credited or charged to operations in the year incurred.

#### f) Fuel for electric generation

Fuel used for electric generation comprises the average inventory costs of fuel consumed less the value attributed to commissioning energy produced, plus provisions for disposal of nuclear fuel used during the period. The inventory cost of fuel comprises fuel purchases, transportation and handling costs.

The costs for disposal of nuclear fuel used in each period are charged to operations based on estimated future expenditures and interest accumulating to the estimated date of disposal. Estimates of expenditures, interest and escalation rates, and the date of disposal are subject to periodic review. Adjustments resulting from changes in estimates are charged to operations on an annuity basis over the period from the year the changes can first be reflected in electricity prices to the estimated in-service date of the disposal facility.

#### g) Foreign currency translation

Current monetary assets and liabilities in foreign currencies are translated to Canadian currency at year-end rates of exchange and the resultant exchange gains or losses are credited or charged to operations. Long-term debt payable in foreign currencies is translated to Canadian currency at year-end rates of exchange. Resulting unrealized exchange gains or losses are deferred and included in deferred debt costs, and are amortized to operations on an annuity basis over the remaining life of the related debt.

Foreign exchange gains or losses on hedges of long-term debt payable in foreign currencies are deferred and included in deferred debt costs. The deferred gains or losses on hedges are amortized to operations on an annuity basis in the periods the hedges provide benefit.

Foreign exchange gains or losses on early redemption of long-term debt, including subsequent gains and losses on short-term replacement financing, are deferred and included in deferred debt costs if the exposure in the foreign currency related to the redeemed debt is continued by refinancing the redeemed debt in the same currency. These deferred gains or losses are amortized on an annuity basis over the period to the original maturity date of the redeemed debt. If the foreign currency exposure is reduced as a result of the early redemption of debt, the resulting foreign exchange gains or losses related to the redeemed debt are credited or charged to operations.

#### h) Deferred debt costs

Deferred debt costs include the unamortized amounts related to unrealized foreign exchange gains or losses resulting from the translation of foreign currency long-term debt; deferred foreign exchange gains or losses on hedges; deferred foreign exchange gains or losses on the early redemption of long-term debt; discounts or premiums arising from the issuance of debt or the acquisition of debt prior to maturity; discounts or premiums accrued on foreign currency hedges; and net unamortized premiums on settled, exercised or expired swaption contracts.

Discounts or premiums arising from the issuance of debt are amortized over the period to maturity of the debt on an annuity basis when the term of the debt exceeds one year and on a straight-line basis when the term is one year or less. Discounts or premiums on debt acquired prior to the date of maturity are amortized on an annuity basis over the period from the acquisition date to the original maturity date of the debt. Discounts or premiums on foreign currency hedges are credited or charged to operations on an annuity basis over the terms of the individual hedges. Net unamortized premiums on settled, exercised or expired swaption contracts are amortized on an annuity basis over the period from the settlement, exercise or expiry date to the original maturity date of the related debt.

#### 1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

#### i) Demand management

Demand management activities undertaken by Ontario Hydro encourage customers to conserve or use electricity more efficiently as an alternative to more expensive generation or to address transmission limitations. Given an expected future move away from the existing rate-regulated, monopoly operating environment toward a more commercial operating environment for Ontario Hydro's generation-related business, Ontario Hydro has implemented an accounting policy change, effective January 1, 1997, whereby generation-related demand management expenditures will be charged to operations as incurred. Transmission-related demand management costs that have reasonably assured and specifically identifiable future benefits to Ontario Hydro will continue to be deferred and amortized to operations on a straight-line basis over the periods that benefit. All other costs are charged to operations as incurred. The benefit periods of deferred demand management costs are subject to periodic review which could result in changes. Any changes arising out of such a review are implemented on a remaining benefit period basis from the year the changes can first be reflected in electricity prices.

#### j) Pension plan

The pension plan is a contributory, defined benefit plan covering all regular employees of Ontario Hydro. Pension costs for accounting purposes are actuarially determined using the projected benefit method prorated on services and based on assumptions that reflect management's best estimate of the effect of future events on the actuarial present value of accrued pension benefits. Pension plan assets are valued using current fair values and pension plan adjustments are amortized on a straight-line basis over the expected average remaining period of service of the employees covered by the Ontario Hydro pension plan.

#### k) Other post-employment benefits

In addition to pension benefits, Ontario Hydro provides group life insurance and health care benefits to its retired employees and, in certain cases, their surviving spouses and unmarried dependents. As well, Ontario Hydro provides long-term disability benefits to qualifying employees during extended absences from work due to sickness or injury.

Effective January 1, 1997, Ontario Hydro will implement accrual accounting for other post-employment benefits in anticipation of new recommendations from the Canadian Institute of Chartered Accountants, whereby the expected costs of providing those benefits will be charged to operations as employees render services. Accordingly, the costs of other postemployment benefits will be actuarially determined for accounting purposes based on assumptions that reflect management's best estimates of the effect of future events on the actuarial present value of the accrued benefits. The transition obligation which arises on conversion to accrual accounting will be charged to retained earnings on January 1, 1997 (see note 15). Prior to January 1, 1997, the costs of other post-employment benefits were charged to operations as the benefits were paid.

#### 1) Research and development

Research and development (R&D) costs are charged to operations in the year incurred, except for: R&D costs related directly to the design or construction of a specific capital facility, which are capitalized as part of the cost of the facility; and R&D costs incurred to discharge long-term obligations, and for which specific provision has already been made, which are charged to the appropriate accumulated provision.

#### 2. SECONDARY POWER AND ENERGY

Secondary power and energy revenues include \$152 million (1995 - \$231 million) from sales of electricity to United States utilities.

3. PROVINCIAL GOVERNMENT LEVIES (millions of dollars)	1996	1995
Provincial water rentals	120	113
Provincial debt guarantee fee	162	170
	282	283

Provincial water rentals are the amounts paid to the Province of Ontario for the use of water for hydroelectric generation. The Province of Ontario has legislated that Ontario Hydro pay to the Province an annual debt guarantee fee of one-half of one per cent on the total debt guaranteed by the Province, outstanding as of the preceding December 31.

4. DEPRECIATION AND AMORTIZATION (millions of dollars)	1996	1995
Depreciation of fixed assets in service	1,465	1,458
Amortization of deferred demand management costs	35	31
Fixed asset removal costs	89	98
Other removal costs	67	53
	1,656	1,640

5. FINANCING CHARGES (millions of dollars)	1996	1995
Interest on bonds, notes and other debt — long-term	2,895	3,227
– short-term	141	149
Interest on accrued fixed asset removal and		
used nuclear fuel disposal costs	170	198
	3,206	3,574
Less:		
Interest charged to – construction in progress	52	74
– fuel for electric generation	2	4
Interest earned on investments	52	123
	106	201
Interest charged to operations	3,100	3,373
Foreign exchange	82	54
	3,182	3,427

6. CORPORATE WRITE-OFFS (millions of dollars)	1996
Future Use Heavy Water	1,203
Nuclear Recovery Expenditures	400
Deferred Demand Management Expenditures	398
Mattagami Development	282
Bruce Nuclear Generating Station "A", Unit 1	277
	2,560

In December 1996, the Board of Directors of Ontario Hydro approved a number of operational decisions in light of future uncertainties, such as possible changes in the volume of electricity sales and energy production plans. The decisions resulted in a number of charges and write-offs to net income in 1996.

Given the early shutdown of Bruce Unit 2 in 1995 and the planned shutdown of Unit 1 in the year 2000, Hydro has sufficient heavy water available from these units to meet loss replacement requirements of other in-service units until additional heavy water becomes available at the completion of the service life of Pickering Nuclear Generating Station "A". Therefore, Hydro's existing supply of heavy water, held to replace losses, has been written off based on the December 31, 1996 expiration of its service life.

Hydro has embarked on a program to ensure that adequate nuclear recovery plan expenditures are made in future years to allow for the achievement of its Nuclear Excellence Strategy. Costs of the program, which are planned to be incurred over the period 1997 to 2001, have been accrued and charged to 1996 operations as approved by the Board of Directors under its rate-setting authority.

Effective January 1, 1997, Ontario Hydro changed its accounting for demand management expenditures such that generation-related demand management expenditures will no longer be deferred and amortized. As such, deferred generation-related demand management expenditures have been written off as at December 31, 1996.

In 1991, Ontario Hydro purchased the Smoky Falls Generating Station and the rights for future development along the Mattagami River. Work on Hydro's capital project involving development on the Mattagami has been deferred since January 1996 pending a decision on whether or not to proceed. Ontario Hydro has decided to limit the scope of the Mattagami redevelopment to Smoky Falls, rather than pursue the full expansion of the Mattagami plants, resulting in a partial write-off of the construction in progress costs related to this project.

Bruce Nuclear Generating Station "A" Unit 1 will be laid up in April of the year 2000. The Bruce Unit 1 loss includes the write-off of related capital amounts, accrual of staff reduction expenditures and adjustment of decommissioning provisions.

7. FIXED ASSETS (millions of dollars)			1996
	Fixed Assets in Service	Accumulated Depreciation	Construction in Progress
Generating stations – hydroelectric	2,546	837	347
– fossil	5,360	2,460	41
– nuclear	24,430	5,340	431
Heavy water	4,014	755	~
Transmission and distribution facilities	11,123	3,219	304
Administration and service facilities	1,793	997	37
	49,266	13,608	1,160
			1995
	Fixed Assets in Service	Accumulated Depreciation	Construction in Progres
Generating stations – hydroelectric	2,512	832	624
– fossil	5,442	2,287	42
– nuclear	24,738	4,873	490
Heavy water	5,346	781	-
Transmission and distribution facilities	10,611	2,890	300

#### Pickering relicensing

Administration and service facilities

In December 1996, the Atomic Energy Control Board granted a six-month renewal of the current license at the Pickering Nuclear Generating Station, after which time a number of performance factors will be reassessed. Management has committed to making the necessary Nuclear Recovery Plan expenditures at Pickering Nuclear Generating Station (note 6).

#### Nuclear steam generator rehabilitation costs

Ontario Hydro has undertaken a major program to rehabilitate steam generators at Pickering "A" and "B" and Bruce "A" Nuclear Generating Stations. The costs of the program, which will continue until 2001, are being deferred and amortized over the remaining service lives of the individual generators commencing as each generator is returned to service. As at December 31, 1996, deferred nuclear steam generator rehabilitation costs included in nuclear generating station construction in progress and fixed assets in service are \$135 million and \$120 million respectively (1995 - \$125 million and \$nil, respectively).

Accumulated depreciation related to the in-service balance amounts to \$1 million as at December 31, 1996 (1995 - \$nil).

1.836

50,485

999

1,476

8. FUEL FOR ELECTRIC GENERATION (millions of dollars)	1996	1995
Inventories – uranium	136	111
– coal	205	225
– oil	27	41
	368	377
9. LONG-TERM DEBT (millions of dollars)	1996	1995
	1996 30,037	1995
9. LONG-TERM DEBT (millions of dollars)  Bonds and notes payable  Other long-term debt		
Bonds and notes payable	30,037	31,395
Bonds and notes payable	30,037 33 30,070	31,395 35

Bonds and notes payable, expressed in Canadian dollars, are summarized by years of maturity in the following table:

1996 1995

Years of Maturity	Prin	Principal Outstanding		Weighted Average	Principal	Weighted Average
	Canadian	Foreign	Total	Interest Rate (per cent)	Outstanding Total	Interest Rate (per cent)
1996	-	-	-		2,701	
1997	1,000	479	1,479		1,399	
1998	2,500	782	3,282		3,183	
1999	2,050	590	2,640		2,150	
2000	1,552	-	1,552		1,552	
2001	1,540	838	2,378			
1 - 5 years	8,642	2,689	11,331	9.0	10,985	9.3
6 - 10 years	6,509	59	6,568	9.6	8,741	9.8
11 - 15 years	3,365	82	3,447	10.7	3,340	10.8
16 - 20 years	648	1,660	2,308	10.0	3,056	11.2
21 - 25 years	2,675	-	2,675	10.5	1,075	10.7
26 years and over	3,708	-	3,708	9.1	4,198	9.8
	25,547	4,490	30,037	9.5	31,395	9.9

#### 9. LONG-TERM DEBT (continued)

The weighted average interest rate represents the effective rate of interest on fixed-rate bonds and notes and the current interest rate in effect at December 31 for floating-rate bonds and notes, all before considering the effect of derivative financial instruments used to manage interest rate risk. Bonds and notes payable are either held, or guaranteed as to principal and interest, by the Province of Ontario.

Bonds and notes payable in United States dollars include \$633 million (1995 - \$1,061 million) of Ontario Hydro bonds held by the Province of Ontario having terms identical with Province of Ontario issues sold in the United States on behalf of Ontario Hydro.

Bonds and notes payable include Canadian \$3,633 million and US \$522 million of bonds callable by Ontario Hydro at fixed prices on dates before their stated maturities (1995 - Canadian \$3,730 million and US \$777 million). The callable bonds have stated maturities over the period 2001 to 2013 and have a weighted average coupon rate of 11.6% (1995 - 12.1%). The bonds are callable by Ontario Hydro at a weighted average call price equal to 101% of the bonds' principal amounts and are callable on specific dates within the period 1997 to 2005.

As described in note 11, Ontario Hydro has used various derivative financial instruments to hedge the foreign exchange exposure related to long-term debt denominated in foreign currencies and to manage the interest rate risk associated with its outstanding long-term debt.

#### 10. BANK INDEBTEDNESS

Bank indebtedness includes short-term bank lines of credit which are available to Ontario Hydro in the amount of \$600 million (1995 -\$600 million), of which \$600 million was utilized at year end (1995 - \$599 million). The lines of credit are unsecured and bear interest at less than the prime rate. Two United States dollar-denominated revolving lines of credit, one a 364-day credit facility and the other a five-year credit facility, are also available to Ontario Hydro. Each of the lines of credit are in the amount of US \$1 billion, none of which was utilized at year end (1995 - nil). Both lines of credit are unsecured and bear interest at the London Interbank Offered Rate (LIBOR) plus 22.5 basis points when fully drawn.

#### 11. DERIVATIVE FINANCIAL INSTRUMENTS

Ontario Hydro has used a variety of derivative financial instruments to manage foreign exchange and interest rate risk.

#### Foreign exchange risk management instruments (millions of stated currency)

The following table summarizes outstanding positions in foreign exchange derivative financial instruments:

996		- 1	99

		Notional Principal O	utstanding	Notional
	Maturing in 1997	Maturing beyond 1997	Total	Principal Outstanding Total
Forward exchange contracts				
Purchased forward	us \$126	us \$157	us <b>\$283</b>	us \$255
	SF13	-	SF13	SF15
Sold forward	us \$194	us \$55	us \$249	us \$181
Cross currency swap contracts				
Ontario Hydro receives:				
United States dollar	-	us \$104	us \$104	us \$104
Swiss franc	-	SF150	sf150	SF150
Japanese yen	-	¥5,000	¥5,000	¥5,000
New Zealand dollar	-	NZ\$100	NZ\$100	_
Australian dollar¹	_	AU\$568	AU\$568	_
Canadian dollar	-	CDN\$423	CDN \$423	_
Foreign currency option combination contracts	us <b>\$240</b>	-	us \$240	-

Periodic swap payments denominated in Japanese yen.

Forward exchange contracts. Ontario Hydro has entered into forward exchange contracts to manage the foreign exchange risk associated with its long-term debt. Forward exchange contracts have also been entered into to hedge firm commitments for future purchases and sales denominated in a foreign currency.

Cross currency swap contracts. Ontario Hydro has entered into cross currency swap contracts to effectively convert principal and interest payments on selected debt issues into Canadian or United States dollars.

Foreign currency option combination contracts. Ontario Hydro has entered into foreign currency option combination contracts (range forwards) to hedge against the impact of a potential decline in the value of the Canadian dollar.

The following table summarizes the currencies in which Ontario Hydro's long-term debt, bank indebtedness and short-term notes are payable, before and after giving effect to Ontario Hydro's foreign exchange risk management activities related to debt:

#### 11. DERIVATIVE FINANCIAL INSTRUMENTS (continued)

(millions of dollars)	1996			1995
	Principal Outstanding		Principal C	Outstanding
	Before Hedging	After Hedging	Before Hedging	After Hedging
Canadian dollars	27,015	27,170	28,341	29,009
United States dollars	3,891	4,635	4,383	3,959
Australian dollars¹	590	-	-	-
Swiss francs	153	-	178	
New Zealand dollars	97	-	_	
Japanese yen	59	_	66	-
	31,805	31,805	32,968	32,968

<sup>1</sup> Coupon payments denominated in Japanese yen.

#### Interest rate risk management instruments (millions of stated currency)

The following table summarizes outstanding positions in interest rate derivative financial instruments.

Notic	onal Principal Outsta	nding	Notional
Maturing in 1997	Maturing beyond 1997	Total	Principal Outstanding Total
CDN\$157	CDN\$692	CDN\$849	CDN\$1,936
us <b>\$269</b>	us \$193	us \$462	us\$777
-	CDN\$3,683	CDN\$3,683	CDN\$3,245
us \$37	us \$744	us \$781	us\$500
n\$1,498	CDN\$3,170	CDN\$4,668	CDN\$2,443
us <b>\$54</b>	us \$653	us \$707	us\$803
	Maturing in 1997  CDN\$157  US \$269  US \$37  ON \$1,498	Maturing in 1997 Maturing beyond 1997  CDN\$157 CDN\$692  US \$269 US \$193  - CDN\$3,683  US \$37 US \$744  NS \$1,498 CDN\$3,170	in 1997 beyond 1997 Total  CDN\$157 CDN\$692 CDN\$849  US \$269 US \$193 US \$462  - CDN\$3,683 CDN\$3,683  US \$37 US \$744 US \$781  N\$1,498 CDN\$3,170 CDN\$4,668

#### 11. DERIVATIVE FINANCIAL INSTRUMENTS (continued)

Swaption contracts. In 1993 Ontario Hydro converted future potential interest savings related to call options embedded in certain of its bonds to cash, by selling offsetting swaption contracts. These contracts permit holders to require Ontario Hydro to enter into interest rate swaps commencing on the call date. If exercised, the swaptions result in Ontario Hydro making payments based on a fixed interest rate equal to the related bonds' coupon rates, and receiving floating rate payments. United States dollar-denominated swaptions may be cash settled on their exercise dates. Premiums received from the sale of these contracts are being amortized to income, as a reduction of interest expense, over the remaining terms of the related bond issues.

Interest rate swap contracts. As at December 31, 1996, the outstanding receive-fixed interest rate swap contracts have effectively converted fixed interest rates on long-term debt to floating interest rates. These contracts have maturity dates over the period 1998 to 2026 (1995: 1997 to 2005). The outstanding pay-fixed interest rate swap contracts have effectively converted floating interest rates on outstanding debt into fixed interest rates. The majority of the Canadian dollar pay-fixed interest rate swaps mature over the period 1997 to 2004 (1995: 1996 to 2004), while the United States dollar pay-fixed interest rate swaps mature over the period 1997 to 2026 (1995: 1997 to 2005).

The following table summarizes the total amount of long-term debt, bank indebtedness and short-term notes maturing or subject to interest rate resetting within one year and after one year, before and after giving effect to Ontario Hydro's interest rate risk management activities:

				1996				1995
	Before interest rate risk management activities	Weighted average interest rate (per cent)	After interest rate risk management activities	Weighted average interest rate (per cent)	Before interest rate risk management activities	Weighted average interest rate (per cent)	After interest rate risk management activities	Weighted average interest rate (per cent)
Matures or reprices								
– within one year	3,217	6.4	4,571	5.9	4,242	8.5	4,781	8.5
– after one year	28,588	9.5	27,234	9.4	28,726	9.8	28,187	9.7
	31,805	9.2	31,805	8.9	32,968	9.6	32,968	9.5

The 1996 amounts in the above table will be affected by treasury activities and the borrowing program in 1997.

#### 12. FAIR VALUE OF FINANCIAL INSTRUMENTS AND CREDIT RISK (millions of dollars)

#### Fair value

The following table presents the carrying amounts and fair values of Ontario Hydro's financial instruments:

		1996		1995
	Carrying Value	Fair Value¹	Carrying Value	Fair Value¹
Financial assets				
Forward exchange contracts	19	12	27	21
Foreign currency option combination contracts	1	1	_	-
Cross currency swap contracts	19	20	42	51
Interest rate swap contracts	. 4	213	-	95
Financial liabilities				
Long-term debt	30,070	36,500	31,430	37,300
Swaption contracts	308	516	657	979
Forward exchange contracts	1	2	_	4
Foreign currency option combination contracts	1	1	_	_
Cross currency swap contracts	38	18	-	-
Interest rate swap contracts	72	387	33	185

Year-end quoted market prices for specific or similar instruments are used to estimate the fair value of each class of financial instrument for which it is practical to estimate that value. For over-the-counter derivative financial instruments, the fair value is determined using pricing models that take into account the current value of termine that the underlying instruments, the time value of money, and mid-market yield curve and volatility factors. The carrying values of cash, short-term investments, accounts receivable, bank indebtedness, short-term notes payable and accounts payable approximate fair value because of the short maturity of those instruments.

#### Credit risk

Financial assets expose Ontario Hydro to credit risk and concentration of credit risk. As at December 31, 1996, there were no significant concentrations of credit risk with respect to any class of financial assets. Derivative financial instruments expose Ontario Hydro to credit risk, since there is a risk of counter-party default. This risk is limited to the cost of replacing contracts in which Ontario Hydro has an unrealized gain.

Credit risk is monitored and minimized by dealing only with a diverse group of highly rated counter parties. In addition, as a means of further reducing its credit exposure on derivative financial instruments, Ontario Hydro enters into master netting agreements with its counter parties to enable it to settle derivative financial assets and liabilities with the counter party on a net basis in the event that the counter party defaults. The existence of these master netting agreements had the effect of reducing Ontario Hydro's current credit risk exposure on derivative financial assets from \$246 million to \$107 million as at December 31, 1996.

#### 13. ACCRUED FIXED ASSET REMOVAL AND USED NUCLEAR FUEL DISPOSAL COSTS 1996 1995 Accrued fixed asset removal costs 907 - accrued decommissioning costs 764 558 - accrued fuel channel removal costs 610 1,465 1.374 1,136 Accrued used nuclear fuel disposal costs 1.045 2,601 2,419

#### Accrued fixed asset removal costs

Accrued fixed asset removal costs are the costs of decommissioning nuclear and fossil generating stations and heavy water production facilities after the end of their service lives, and the costs of removing certain fuel channels which are expected to be replaced during the life of the nuclear reactors. The significant assumptions used in estimating future fixed asset removal

- decommissioning of nuclear generating stations in the 2042 to 2062 period on a deferred dismantlement basis (dismantlement following storage with surveillance for a 30-year period after shutdown of the reactors), and an average transportation distance of 1,000 kilometres from nuclear generating facilities to disposal facilities (1995 - 1000 kilometres);
- interest rates through to 2065 ranging from 7% to 10% (1995 6% to 10%);
- escalation rates through to 2065 ranging from 1% to 7% (1995 1% to 7%); and
- removal and replacement of fuel channels in nuclear generating stations during the following periods:

	1996	1995
Bruce "A" Units 3 & 4	2006 to 2008	2000 to 2008
Pickering "B"	2009 to 2014	2009 to 2016
Bruce "B" .	2011 to 2017	2011 to 2019
Darlington	2016 to 2022	2016 to 2024

The significant assumptions underlying the estimates of accrued fixed asset removal costs are subject to periodic review. These assumptions, as well as the existing methods and technology used for decommissioning and fuel channel removal and replacement, may change and could result in changes to these costs.

#### Accrued used nuclear fuel disposal costs

The significant assumptions used in estimating the future used nuclear fuel disposal costs were:

- an in-service date of the year 2025 (1995 2025) for used nuclear fuel disposal facilities;
- an average transportation distance of 1,000 kilometres (1995 -1,000 kilometres) from nuclear generating facilities to disposal
- interest rates through to the disposal date ranging from 7% to 9% (1995 6% to 9%);
- escalation rates through to the disposal date ranging from 1% to 7% (1995 1% to 7%).

The significant assumptions underlying the estimates of accrued used nuclear fuel disposal costs are subject to periodic review. These assumptions, as well as the existing methods and technology used for used fuel disposal, may change and could result in changes to these costs.

#### 14. CONTINGENCIES AND COMMITMENTS

#### Manitoba Hydro

In December 1992, due to a projected surplus in generating capacity, Ontario Hydro exercised its right to terminate its long-term power purchase contract with Manitoba Hydro. In Manitoba Hydro's certificate of costs for reimbursement, an amount of \$55 million was claimed for costs incurred by Manitoba Hydro prior to entering into the contract with Ontario Hydro on December 7, 1989. Ontario Hydro is of the opinion that costs incurred by Manitoba Hydro before December 7, 1989 are not reimbursable by Ontario Hydro under the contract. As well, based on a review of the certificate of costs, it appears that the total cost claimed by Manitoba Hydro may have been overstated. Ontario Hydro has commenced an action against Manitoba Hydro for a declaration that Ontario Hydro is not obliged to pay costs incurred prior to entering into the contract and for a further judgment against Manitoba Hydro requiring the repayment of amounts which were improperly claimed by Manitoba Hydro and paid by Ontario Hydro under the contract. In July 1994, Manitoba Hydro issued its statement of defence and counterclaim to Ontario Hydro. Manitoba Hydro claims that they are entitled to an immediate payment from Ontario Hydro of \$57 million, representing the claim for costs incurred by Manitoba Hydro prior to entering into the contract, plus interest. At this time, the outcome of these claims are not determinable, and as such, no provision has been accrued in Ontario Hydro's financial statements with respect to any amounts in dispute.

#### Power purchase agreements

Ontario Hydro purchases a portion of its electricity requirements pursuant to long-term contractual power purchase agreements (PPAs) with various independent power producers. The PPAs, representing in-service capacity of approximately 1,225 megawatts as at December 31, 1996 (1995 - 1,050 megawatts), expire on various dates from 1999 to 2045. The obligations to purchase power under these contracts over the next 20 years have a total net present value of approximately. \$6,550 million with estimated payments over the next five years, in dollars of the year, as follows: 1997 - \$685 million; 1998 - \$706 million; 1999 - \$726 million; 2000 - \$741 million; and 2001 - \$756 million.

Deliveries in the aggregate accounted for approximately 5.5% of Ontario Hydro's 1996 electric energy requirements (1995 - 5.2%). The amount of energy received and the total payments made under these agreements were:

	1996	1995
Gigawatt-hours received	7,927	7,565
Power purchases (millions of dollars)	482	428

#### Loan guarantees

Ontario Hydro is contingently liable under guarantees given to third-party lenders who have provided long-term financing to certain independent power producers. These guarantees total approximately \$182 million as at December 31, 1996 (December 31, 1995 -\$193 million).

15. RETAINED EARNINGS (millions of dollars)	1996	1995
Balance at beginning of year	4,540	3,912
Net (loss) income	(1,988)	628
Balance at end of year	2,552	4,540

The balance in this account is retained for purposes prescribed under the Power Corporation Act. On January 1, 1997, the retained earnings balance of \$2,552 million will be reduced by \$763 million to \$1,789 million as a result of charging the transition obligation associated with the change in accounting for other post-employment benefits (see note 17).

#### 16. Consolidated Statement of Changes in Cash Position

The changes in non-cash working capital and long-term accounts payable affecting operations consisted of the following:

(millions of dollars)	1996	1995
Accounts receivable - decrease	62	138
Fuel for electric generation, materials and supplies - (increase) decrease	(20)	143
Accounts payable and accrued charges - (decrease)	(10)	(248)
Accrued interest -(decrease)	(104)	(12)
Long-term accounts payable and accrued charges - (decrease)	(14)	(1)
	(86)	20

#### 17. BENEFIT PLANS

Ontario Hydro's employee benefit programs include the pension plan, the group life insurance plan, the long-term disability plan and the group health care plan.

#### Pension plan

Pension costs for 1996 were \$111 million (1995 - \$74 million). In 1996, \$89 million (1995 - \$59 million) of the pension costs were charged to operations and \$22 million (1995 - \$15 million) were capitalized as part of the cost of fixed assets.

The actuarial present value of the accrued pension benefits is estimated to be \$5,987 million as at December 31, 1996 (1995 - \$6,290 million), and the pension plan assets available for these benefits were \$8,964 million (1995 - \$7,790 million) based on current fair values.

The actuarial present value of the accrued pension benefits was determined for accounting purposes using the following significant assumptions which reflect management's best estimate and take into consideration the long-term nature of the pension plan:

- rate used to discount future pension benefits 8.25% (1995 7.75%);
- salary escalation rate 3.00% (1995-3.00%) plus an age and service dependent increase in respect of promotion, progression and merit;
- average long-term rate used to estimate improvements in pension benefits to partially offset the effect of increase in cost of living 2.06% (1995 - 2.06%); and
- average remaining service period of employees 15 years (1995 16 years).

Deferred pension costs on the statement of financial position represent cumulative difference between funding contributions, including special payments, and pension costs. As at December 31, 1996, deferred pension costs amounted to \$131 million (1995 - \$149 million) and primarily reflect special payments made in 1990 and 1991 relating to past service benefit improvements offset by costs associated with the 1993 voluntary staff reduction program. The costs of pension benefit improvements funded by the special payments are being amortized as a charge to pension costs on a straight-line basis over the average remaining service period of employees.

#### Group life insurance plan

Ontario Hydro paid \$1 million (1995 -\$6 million) in premiums for basic insurance coverage for employees. Premiums for additional coverage, if requested, are paid for by the employee.

#### Group health care plan

Ontario Hydro provides a group health care plan to its employees. In 1996, the cost of providing these benefits was \$62 million (1995 - \$55 million).

#### Other post-employment benefits

In addition to pension benefits, Ontario Hydro provides group life insurance and health care benefits to its retired employees and, in certain cases, their surviving spouses and unmarried dependents. The cost of providing the group life insurance and health care benefits is charged to operations as the benefits are paid. In 1996, the cost of providing these benefits was \$22 million (1995 - \$21 million).

As well, Ontario Hydro provides long-term disability benefits to qualifying employees during extended absences from work due to sickness or injury. The long-term disability plan is entirely funded by Ontario Hydro. For 1996, contributions to the plan amounted to \$12 million (1995 -\$10 million).

#### 17. BENEFIT PLANS (continued)

In December 1996, Ontario Hydro decided to adopt accrual accounting for other post-employment benefits in anticipation of new recommendations from the Canadian Institute of Chartered Accountants on the accounting for other post-employment benefits. Effective January 1, 1997, the costs of other post-employment benefits will be actuarially determined for accounting purposes based on assumptions that reflect management's best estimates of the effect of future events on the actuarial present value of the accrued benefits. The transition obligation of \$763 million which arises on conversion to accrual accounting will be charged to retained earnings on January 1, 1997.

#### 18. RESEARCH AND DEVELOPMENT

In 1996, approximately \$91 million of research and development expenditures were charged to operations, \$4 million were capitalized and \$30 million were charged to accrued provisions (1995 -\$73 million; \$9 million and \$35 million, respectively).

#### 19. STRANDED DEBT, INDUSTRY CHANGES AND ASSET IMPAIRMENT

Given recent and expected changes in the nature of the Ontario electricity industry, Hydro has recognized that its existing debt load is too great and that it is over-leveraged to compete in a future restructured market. In a future competitive marketplace, certain of Hydro's assets may no longer be recoverable from revenues. This situation has resulted from a combination of recent load growth being less than predicted and the effects of external industry restructuring.

Moreover, Ontario Hydro has operated a a rate-regulated, non-tax-paying monopoly since the Corporation was formed over 90 years ago with a mandate to supply power at cost upon demand. Accordingly, Hydro has developed the asset base necessary to meet the predicted needs of Ontario's electricity customers. In common with many government-owned public utilities, the development of this asset base has resulted in a highly leveraged financial structure for the Corporation.

Consistent with changes occurring in other North American jurisdictions, it is anticipated that Hydro's regulated and monopoly status will change during the next several years to allow for more competition and reduced regulation in certain parts of its operations, in particular, in power generation. These external changes are expected to result in significant additional financial and organizational restructuring of Hydro and the introduction of some form of corporate taxation.

The Advisory Committee on Competition in Ontario's Electricity System (the Macdonald Committee) was asked to make recommendations on options for introducing competition within Ontario's electricity industry. The Macdonald Committee estimated that a \$15-billion reduction in Hydro's existing debt would be required to restructure Hydro along more commercial lines and to offset unrecoverable assets. Ontario Hydro has carried out further analysis and has estimated that a debt level that is between \$10 billion and \$21 billion less than the current level would result in a more appropriate financial structure for the Corporation when competition is introduced into Ontario. Hydro has adopted a \$16-billion estimate of potentially stranded debt for strategic discussion purposes.

A number of mechanisms exist to address stranded debt, such as a debt to equity conversion, an exit fee imposed on departing customers, a transition charge collected as a component of transmission tariffs, or a transition charge collected as a surcharge on distribution tariffs, some of which are used or have been proposed in other North American jurisdictions. Hydro expects that a suitable mechanism can be put in place to allow any stranded debt to be discharged over a reasonable time frame without the need for rate increases.

Of Hydro's \$16-billion stranded debt estimate, about \$2 billion can be related to assets that may not be recoverable in a future competitive environment and to uneconomic power purchase agreements with independent power producers. Specifically, Hydro has estimated the potential loss on these power purchase agreements to be within the range of nil to \$2.1 billion. Given the significant amount of uncertainty regarding future electricity prices, the existence and amount of any potential future loss is not reasonably determinable.

The possibility that certain assets and power purchase agreement costs may in future no longer be fully recoverable does not pose a risk for holders of Ontario Hydro's bonds and notes, which are either held, or guaranteed as to principal and interest, by the Province of Ontario.

#### 20. COMPARATIVE FIGURES

Certain of the 1995 comparative figures in the financial statements have been reclassified to conform with the 1996 financial statement presentation.

# Five-Year Summary of Financial and Operating Statistics

(millions of dollars)	1996	1995	1994	1993	1992
Revenues					
Primary power and energy					
Municipal utilities	5,857	5,899	5,829	5,721	5,281
Retail customers	1,647	1,635	1,688	1,641	1,568
Direct industrial customers	903	914	866	873	863
	8,407	8,448	8,383	8,235	7,712
Secondary power and energy	172	233	349	128	56
Other revenues	307	315	264	112	104
	8,886	8,996	8,996	8,475	7,872
Costs					
Operation, maintenance and administration <sup>1</sup>	2,008	1,916	1,913	2,131	2,296
Fuel used for electric generation <sup>1</sup>	615	607	608	952	1,191
Power purchased	571	495	341	260	186
Provincial government levies	282	283	284	286	270
Depreciation and amortization	1,656	1,640	1,595	1,506	1,198
	5,132	4,941	4,741	5,135	5,141
Income before financing charges	3,754	4,055	4,255	3,340	2,731
Financing charges					
Gross interest	3,206	3,574	3,544	3,849	3,782
Capitalized interest	(54)	(78)	. (123)	(462)	(1,231)
Investment income	(52)	(123)	(63)	(65)	(119)
Foreign exchange	82	54	42	8	(13)
	3,182	3,427	3,400	3,330	2,419
Income before corporate write-offs	572	628	855	10	312
Corporate write-offs	2,560	-	268	3,614	-
Net (loss) income	(1,988)	628	587	(3,604)	312

(millions of dollars)	1996	1995	1994	1993	1992
Financial position					
Total assets	39,870	42,984	44,100	44,706	46,671
Fixed assets	36,818	39,299	39,907	40,740	40,690
Long-term debt <sup>2</sup>	30,070	31,430	32,967	33,685	34,034
Equity	2,552	4,540	3,912	3,325	6,931
Cash flows					
Cash provided from operating activities	2,228	2,479	2,256	1,332	1,691
Cash (used for) provided from financing activities	(1,533)	(1,686)	(1,245)	404	1,784
Cash used for investment in fixed assets	868	932	1,089	1,871	3,375
Investment in fixed assets	844	881	1,164	2,296	3,527
Financial indicators					
Interest coverage before corporate write-offs <sup>3</sup>	1.19	1.19	1.25	1.00	1.09
Interest coverage after corporate write-offs <sup>8</sup>	0.35	-	1.17	0.04	
Debt ratio⁴	0.930	0.886	0.904	0.918	0.841
Energy sales <sup>5</sup> millions of kilowatt-hours					
Primary energy sales					
Municipal utilities	94,565	94,606	93,405	92,093	91,317
Retail customers	18,603	18,390	18,499	18,519	18,938
Direct industrial customers	18,490	18,651	17,552	17,415	18,094
	131,658	131,647	129,456	128,027	128,349
Secondary energy sales <sup>5</sup>	6,112	9,203	12,628	4,807	1,896
	137,770	140,850	142,084	132,834	130,245

	1996	1995	1994	1993	1992
Energy and demand					
In-service capacity megawatts <sup>6</sup>	29,844	29,244	30,135	31,851	31,309
December primary peak demand megawatts	20,895	22,613	21,849	20,506	21,339
Primary energy made available millions of kilowatt-hours'	137,418	137,038	134,874	133,769	134,376
Number of primary customers <sup>s</sup>					
Municipal utilities	306	306	306	309	311
Retail customers	963,043	962,426	954,502	942,812	940,617
Direct industrial customers	103	103	103	104	107
Average revenue <sup>5</sup> in cents per kilowatt-hour of total energy sales					
Primary power and energy					
Municipal utilities	6.194	6.235	6.241	6.212	5.783
Retail customers	9.431	9.376	9.684	9.265	8.884
Direct industrial customers	4.884	4.901	4.934	5.013	4.770
All primary customers combined	6.441	6.464	6.529	6.473	6.070
Secondary power and energy	2.814	2.532	2.764	2.663	2.954
All classifications combined	6.279	6.205	6.192	6.334	6.024
Average rate increases (decreases) expressed as a per cent					
Municipal utilities	0.0	0.0	0.0	8.2	11.8
Retail customers	(0.6)	0.0	0.0	6.5	11.8
Direct industrial customers	(0.2)	(0.7)	0.0	8.2	11.8
All primary customers combined	(0.1)	(0.1)	0.0	7.9	11.8

	1996	1995	1994	1993	1992
Average cost 1.5,8 in cents per kilowatt-hour of energy generated					
Hydroelectric					
Operation, maintenance and administration	.312	.316	.318	.277	.280
Water rentals	.335	.344	.336	.330	.317
Depreciation, debt guarantee fee and financing charges	.313	.415	.543	.488	.454
Other revenues	(.006)	(.003)	(.011)	-	_
	0.954	1.072	1.186	1.095	1.051
Nuclear					
Operation, maintenance and administration	1.228	1.066	1.032	.973	1.152
Uranium	.255	.268	.285	.541	.554
Depreciation, debt guarantee fee and financing charges	4.143	3.946	3.530	3.910	3.080
Other revenues	(.118)	(.103)	(.118)	(.009)	(.008
	5.508	5.177	4.729	5.415	4.778
Fossil					
Operation, maintenance and administration	1.051	1.166	1.331	1.311	.989
Coal, gas and oil	2.218	2.394	2.378	2.515	2.426
Depreciation, debt guarantee fee and financing charges	2.496	3.229	3.732	3.022	1.648
Other revenues	(.073)	(.121)	(.020)	(.007)	(.029
	5.692	6.668	7.421	6.841	5.034
Average number of employees					
Regular	21,313	21,505	22,525	26,442	28,835
Non-regular <sup>9</sup>	1,873	1,573	2,082	3,331	6,004

- 1 Operation, maintenance and administration and fuel costs have been restated to exclude other revenues.
- Long-term debt includes long-term debt payable within one year.
- Interest coverage represents net income plus interest on bonds, notes, and other debt divided by interest on bonds, notes and other debt.
- Debt ratio represents debt (bonds and notes payable, short-term notes payable, other long-term debt, unamortized swaption premiums, accrued fixed asset removal and used nuclear fuel disposal costs and bank lines of credit less unamortized foreign exchange gains and losses) divided by debt plus equity.
- Figures for 1996 are preliminary.
- In-service capacity represents the net output power supplied by all generating units, net firm power purchase contracts and purchases from independent power producers. Excluded are non-operating reserve facilities of: 1996 - 4,300 MW; 1995 - 5,043 MW; 1994 - 4,297 MW; 1993 - 2,686 MW; and 1992 - 1,554 MW.
- Primary energy made available represents primary energy sales plus transmission losses and energy used for heavy water production and generation projects.
- Average cost per killowatt-hour represents the costs attributable to generation but excludes the costs related to transmission, distribution and corporate administrative activities. These figures reflect the historical accounting costs of operating facilities and the actual energy generated by these facilities during the year.
- The majority of non-regular staff are construction trades persons.

CUSTOMERS SERVED BY ONTARIO HYDRO AND ASSOCIATED MUNICIPAL UTILITIES	1996¹	1995	1994	1993	1992
Total number of customers in thousands					
Residential	3,369	3,329	3,293	3,252	3,205
Farm	101	103	103	103	104
Commercial and industrial	439	441	437	436	430
	3,909	3,873	3,833	3,791	3,739
Average annual use in kilowatt-hours per customer					
Residential	10,318	10,421	10,763	10,965	11,024
Farm	23,933	22,432	23,138	23,660	23,496
Commercial and industrial	204,103	205,123	201,265	198,841	201,112
Average revenue <sup>2</sup> in cents per kilowatt-hour					
Residential	8.87	8.84	8.83	8.77	8.12
Farm	9.33	8.96	8.93	8.82	8.19
Commercial and industrial	6.54	6.80	6.75	6.76	6.31
All customers	7.23	7.27	7.37	7.38	6.86

Figures for 1996 are preliminary.
 Includes rural rate assistance.

# Corporate Governance Practices

In a year in which corporate governance became an increasingly prominent issue, the Ontario Hydro Board of Directors approved a document, "Policies & Procedures," which serves to regulate proceedings of the Board in furtherance of the best interests of the Corporation.

Under the Power Corporation Act (PCA), the Corporation is governed by a Board of Directors consisting of up to 22 members. Included in this membership is the Deputy Minister of Environment and Energy, a Director who shall not vote at any meeting of the Board. The Chairman and Directors of the Board are appointed by the Lieutenant Governor in Council, and the President is appointed by the Board. The Board of Directors recommends to the Government of Ontario that it appoint either the Chairman or the President as the Chief Executive Officer.

As stipulated in the PCA [Section 4(1)], the Board manages the business and affairs of the Corporation, and it is consequently involved in considering significant issues facing the Corporation. The Chairman of the Board and the Chairs of the Board Committees, in working with management, determine what matters are put before the Board.

The Hydro Board also recognizes that it may supervise, direct or oversee the business and affairs of the Corporation, but that it should not manage them, at least not in a day-to-day sense. This kind of management is delegated to the CEO and other senior Hydro officers, who are accountable to, and report back to, the Board from time to time.

Effective corporate governance requires every Director to assume responsibility for the stewardship of the Corporation. As part of this overall stewardship responsibility, the Ontario Hydro Board, subject to policy directives from the Minister of Environment and Energy under the PCA, has explicitly assumed

specific responsibility for the following matters:

- adoption of a strategic planning process and the approval of a Corporate strategic plan and annual operating plan;
- identification of the principal risks of the Corporation's business and ensuring the implementation of appropriate systems to manage those risks;
- succession planning, including appointing, training and monitoring senior management;
- communications policy for the Corporation; and
- integrity of the Corporation's internal control and management information systems.

#### Position Descriptions

In recognizing the concept that the evaluation of senior officer performance is one of the most important functions of the Board, the accountabilities of the Chairman and the President & CEO received Board approval in 1995 and are monitored on an annual basis. In addition to a detailed description of principal functions, the Board also approved, for the President and CEO, standards for measuring performance, professional qualifications and desired attributes.

#### MEETING INDEPENDENTLY OF MANAGEMENT

External Board members are provided the opportunity to meet in executive session with the Chief Executive Officer at each Board meeting, and to meet in executive session without the Chief Executive Officer and members of management several times during the year.

#### COMMITTEES OF THE BOARD

Board Committees are established to assist in carrying out the Board's role and responsibilities. To facilitate this task, in January, the Ontario Hydro Board reorganized its previous 12 committee structure to that which is described on pages 70 and 71.

#### Audit/Finance Committee

The mandate of the Audit/Finance Committee is to advise the Board and to make recommendations for its consideration with respect to: the review of financial reporting matters, the system of internal accounting and financial controls and procedures, and the audit procedures and audit plans; the nomination, remuneration function and performance of the external auditors; the form and content of the Corporation's annual financial statements, the annual report and any interim or ad hoc documents required by regulatory authorities; the review, on an annual basis, of the financial plans and objectives of the Corporation; the review of matters relating to the funding and investment of funds of the Corporation's pension plan; an annual review of the risks inherent in the Corporation's business and related risk management programs; the Corporation's policies with respect to debt management, money market activities and the Corporation's banking resolutions; and the Corporation's policies with respect to debt management, foreign exchange management and corporate financial investments.

As defined in the PCA, the President and CEO is a member of the Committee for that section of the mandate related specifically to financial matters. In turn, he does not vote and, where appropriate, absents himself, from discussion on items of an audit nature.

In carrying out its responsibilities, the Committee occasionally meets with both the external and internal auditors, without the Chief Executive Officer and members of management present.

The Audit/Finance Committee met 11 times during 1996.

#### Membership

R.D. Fullerton - Chair

W.A. Farlinger

D.W. Kerr

O.A. Kupcis

J.D. Murphy

M. Cassidy

A.A. Noonan

#### **Environment & Public Policy Committee**

The mandate of the Environment & Public Policy
Committee is to advise the Board and to make recommendations for its consideration with respect to the
Corporation's strategic focus and direction on matters
relating to: health and safety; social obligations; relations
with Aboriginal peoples; and sustainable development
and the environment. Specifically, the Committee will
ensure that the Corporation's actions reflect the interests
of governments, non-governmental organizations, the
people of Ontario and the employees of Ontario Hydro.

The Environment & Public Policy Committee met twice during 1996.

#### Membership

N. Beck - Chair

W.A. Farlinger

K. Cummings

O.A. Kupcis

J. MacNeill

C. Anderson M. Cassidy D. McCaig

A.A. Noonan

### Human Resources & Corporate Governance Committee

The mandate of the Human Resources & Corporate Governance Committee is to advise the Board and to make recommendations for its consideration with respect to: the strategic prospects and options for the future of Ontario's electric power industry in general, and Ontario Hydro specifically; the review of written objectives of the CEO and the provision of guidance for the development of corporate strategy; the Corporation's objectives and policies concerning the recruitment, development and placement, including promotion, of senior management; the annual review and assessment of the performances of the Chairman and the President & CEO; the annual review of organizational structure matters; the monitoring of the quality of the relationship between management and the Board; and the responsibility for Board governance of the Corporation, including the mandate to review the Board Committee structure and to undertake such other initiatives as required to ensure the Board delivers exemplary corporate governance.

The Human Resources & Corporate Governance Committee met nine times in 1996.

#### Membership

A. Sawchuk - Chair

W.A. Farlinger D. Harvey
O.A. Kupcis D.W. Kerr
R.D. Fullerton R.M. Mathur

#### **Nuclear Review Committee**

The mandate of the Nuclear Review Committee is to advise the Board and to make recommendations for its consideration with respect to the safe performance of the Corporation's nuclear operations and its effectiveness in achieving desired results. Specifically, the Committee will ensure that Ontario Hydro's nuclear facilities are operated and maintained in a rigorous and vigilant manner to ensure that the radiological risk to workers, the public and the environment is acceptably low, and in keeping with the best practices in the international nuclear community.

The Nuclear Review Committee met five times during 1996, including two site visits to Pickering NGS and one site visit to Bruce NPD.

#### Membership

R.M. Mathur - Chair

W.A. Farlinger D. Harvey
O.A. Kupcis J. MacNeill
C. Anderson D. McCaig
K. Cummings J.D. Murphy

#### PERFORMANCE OF THE BOARD

As part of its mandate, the Human Resources & Corporate Governance Committee is responsible for assessing the effectiveness of Board operation, and it was determined that a survey, conducted on an annual basis, would be the most appropriate vehicle.

At the December 1996 Board meeting, an evaluation form was distributed, and, in January 1997, the external members of the Board met in executive session to review the compiled results. Areas of discussion included: monitoring performance and strategic planning; independence of the Board; director orientation and development; Board leadership, teamwork and management relations; Board (and Committee) meetings and information; management evaluation and compensation; and succession planning.

## Board of Directors



Standing (left to right): Jim MacNeill (President, MacNeill & Associates)

Michael Cassidy (President, The Ginger Group Consultants)

Dr. Mohan Mathur (Dean, Faculty of Engineering Science, University of Western Ontario)

Carl Anderson (Alternating Chair, North York Hydro-Electric Commission) William A. Farlinger (Chairman, Board of Directors, Ontario Hydro)

Kealey Cummings (Former National Secretary/Treasurer, Canadian Union of Public Employees)

Dr. Allan Kupcis (President & Chief Executive Officer, Ontario Hydro)

Arthur Sawchuk (Chairman, President & Chief Executive Officer, DuPont Canada Inc.)

Dona Harvey (Journalist)

John Murphy (President, Power Workers' Union)

Seated (left to right): Anne Noonan (President, Anne Noonan & Associates Inc.)

Lawrence Leonoff (Senior Vice-President, General Counsel and Secretary of the Board)

Eleanor Clitheroe (Executive Vice-President, Corporate Business Development and Chief Financial Officer, Ontario Hydro)

David Kerr (Vice-Chairman, Board of Directors; Chairman & Chief Executive Officer, Noranda Inc.)

**Donald Fullerton** (Chairman, Executive Committee, Canadian Imperial Bank of Commerce)

Absent. Nuala Beck (President, Nuala Beck & Associates Inc.)

Doug McCaig (Former Chairman, Municipal Electric Association)

Linda Stevens (Deputy Minister of Environment and Energy, Province of Ontario) (non-voting member)

# Organization and Corporate Officers

#### William A. Farlinger

Chairman, Board of Directors

#### Dr. Allan Kupcis

President and CEO

#### G. Carl Andognini

Executive Vice-President and Chief Nuclear Officer

#### Eleanor R. Clitheroe

Executive Vice-President, Corporate Business Development and Chief Financial Officer

#### John C. Fox

Executive Vice-President, Managing Director – Ontario Hydro Generation Company

#### M. Karen Robinson

Executive Vice-President, Managing Director – Ontario Hydro Transmission Company

#### Ron H. Stewart

Executive Vice-President, Managing Director – Ontario Hydro Retail Company

#### Lawrence E. Leonoff

Senior Vice-President, Corporate General Counsel and Secretary

#### Mary F. McLaughlin

Vice-President - Corporate Affairs

#### J. Rod Taylor

Vice-President - Corporate Strategies

#### Jim R. Burpee

General Manager - Bruce Nuclear

#### Dr. Jim Brown

Vice-President – Technology Services and New Product Development

#### Larry V. Doran

General Manager - Hydroelectric

#### **Dave Goulding**

Senior Vice-President - Central Market Operations

#### Ian M. London

Senior Vice-President – Commercial Analysis and Venture Development

#### T.W. Brian MacFarlane

Acting General Manager - Fossil

#### Malen S. Ng

Vice-President - Corporate Finance

#### Tom Rusnov

General Manager - Distribution Operations

#### R.J. (Bob) Strickert

Acting General Manager - Darlington Nuclear

#### Vipin K. Suri

Vice-President - Corporate Services

#### Ken H. Talbot

Acting General Manager - Pickering Nuclear

#### Dr. Susan J. Wright

Vice-President - Human Resources

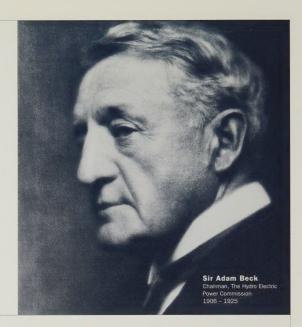
#### Bruce L. Bennett

General Auditor

#### John C. Mulligan

Treasurer

"We have been in business since 1906. We have been pleasing and displeasing the public ever since. We have been 'cussed' and discussed, boycotted and investigated, talked about, lied about, hung up, held up and robbed. The only reason we are staying in business is to see what is going to happen next." — Sir Adam Beck, May 1922



# **The Power of Ontario – The Power of Change**



1996 was a year of celebration at Ontario Hydro. It was, for all of us, an opportunity to celebrate the corporation's 90th anniversary and to reflect on the great distance we

have travelled since Sir Adam Beck first conceived his vision of providing the people of Ontario with cheap and accessible power. Created in 1906, The Hydro Electric Power Commission earned an early reputation for technical leadership and innovation with the completion of the world's largest hydroelectric dams at Niagara Falls.

Those early pioneers met the engineering challenges in Ontario's frontier with innovation and entrepreneurial spirit and set the standard for an electrical system that has become the signature for excellence. Today, the core of these achievements represents one of the world's largest and most reliable energy

systems, a system that has proven to be an engine for economic development and prosperity and the foundation for the power of Ontario.

Ontario Hydro now stands at the threshold of a new and exciting era in our industry. Today's electricity users are sophisticated, informed consumers who expect more choice and flexibility. The changes we see happening in our industry are unprecedented, and are changes that will demand new skills and new services as the energy market becomes more competitive.

We enjoy the wisdom and strength of 90 years of experience and a reputation for excellence worldwide, and we're working hard to retain this position as we expand our vision beyond electricity and the borders of Ontario.

Our task now is to focus that experience and inventive spirit on new markets in new ways. Having proved our ability, we embrace the power of change and the opportunities we see over the next 90 years.

# Please Recycle Materials used in this report are environmentally friendly. Cover and text stocks are recycled and recyclable, with a minimum of 10% post-consumer waste. Vegetable-based inks have been used throughout.

Ontario Hydro's head office is located at 700 University Avenue, Toronto, Ontario M5G 1X6. Visit Ontario Hydro's site on the World Wide Web at www.hydro.on.ca

Ce rapport est également publié en français.